

# Versalis for 2021

A just transition



# Versalis's Mission

To lead sustainable chemistry,  
driving change  
to create value for people.

## Eni's Mission

We are an energy company.

- 13 15** We concretely support a just energy transition, with the objective of preserving our planet
- 7 12** and promoting an efficient and sustainable access to energy for all.
- 9** Our work is based on passion and innovation, on our unique strengths and skills,
- 5 10** on the equal dignity of each person, recognizing diversity as a key value for human development, on the responsibility, integrity and transparency of our actions.
- 17** We believe in the value of long-term partnerships with the Countries and communities where we operate, bringing long-lasting prosperity for all.

### Global goals for a sustainable development

The 2030 Agenda for Sustainable Development, presented in September 2015, identifies the 17 Sustainable Development Goals (SDGs) which represent the common objectives of sustainable development to address current complex social problems. These goals are an important reference for the international community and Eni in managing activities in those Countries in which it operates.



# VERSALIS FOR 2021

## A JUST TRANSITION

### **Disclaimer**

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## Why read Versalis for 2021?

In this document, Versalis aims to describe its commitment to the development of sustainable and circular models, in line with Eni's strategy and values.

This first Report illustrates the Company's path in dealing with the current political and economic context, which is both rather complex and challenging.

The document explores the commitments, actions and projects undertaken by Versalis to achieve the goal of Carbon Neutrality by 2050, Operational Excellence for the achievement of strategic objectives, and the importance of Alliances for Development for the creation of value through continuous dialogue with stakeholders in the various countries where Versalis operates.

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## Message to our stakeholders

Dear stakeholders, it is with great pleasure and satisfaction that we publish the first Sustainability Report of Versalis, Eni's chemical company.

This document proves our ongoing commitment to sustainability, in respect of people and territories in which we operate, and aims to tell about the many activities we undertake on a daily basis for the transition towards carbon neutrality by 2050, in line with Eni's broader strategy.

We are experiencing an unprecedented period in history which in the last two years put us through a global pandemic and a conflict in Europe, with a series of consequences of significant impact on industrial activities, such as logistic difficulties, scarcity of raw materials, and the rising cost of energy.

These complexities have not slowed us on our path: we continue to innovate and transform ourselves into a fully differentiated and sustainable company, which creates value for all stakeholders.

Never before has chemistry proven to be a key sector for the supply of strategic products and materials, and a catalyst for innovation with a key role on the path towards a low-carbon and circular economy, as it provides cutting-edge and integrated solutions along the entire value chain: the energy transition is first and foremost a technological transition.

Such an ambitious target requires everyone's involvement: collabo-

ration between stakeholders and all actors in the supply chain is a key driver to accelerate the implementation of concrete and sustainable solutions. As Versalis, we are protagonist in this change and are highly committed in contributing to the ambitious objective of Zero Net emissions by 2050 within Eni's strategy, through Research and Innovation and strategic partnerships.

We continue to develop both new and existing technologies to reduce the direct emissions of our processes; we are promoters, through our projects, of solutions for the chemical industry's supply chain sustainability: we strongly believe in the development of the circular economy and chemistry from renewable sources not only as decarbonization levers, but also as competitive edge.

As polymers producers, we work with the utmost determination to achieve the aim of full circularity of plastics, implementing complementary processes of advanced mechanical and chemical recycling, capable of recovering the material and giving it new life. This further allows us to avoid emissions associated with traditional waste disposal processes and reduce dependence on fossil fuels. As Versalis, we are at the forefront of technological development in this sector, leveraging our know-how and industrial experience.

In the field of chemistry from renewable sources, we are strongly committed to accelerating the development of solutions through our technology platforms, R&D, market partnerships and the

strong integration with Eni. The year 2021 was one full of satisfaction in this journey of transformation.

To accelerate the reduction of emissions from our processes, we joined "Cracker of the future", a consortium of chemical producers which is working to develop a technology to electrify steam cracking plants, which are the heart of the chemical industry.

An important step on the path towards the decarbonization is the transformation of the site at Porto Marghera, which provides for a number of initiatives, including the construction of a major hub for the advanced mechanical recycling of plastics. Overall, the plan will result in a cut in CO<sub>2</sub> emissions from the Versalis site of approximately 600,000 tons / year.

To demonstrate the sustainability and traceability requirements of our production, we successfully completed the ISCC PLUS certification of our industrial sites, thereby offering the market a new Balance® range of products made from bionaphtha and a pyrolysis oil obtained from the chemical recycling process of plastic waste.

This new line adds to the Versalis Revive® portfolio of products made from mechanically recycled raw materials: this year we have succeeded, thanks to collaboration with various players in the supply chain, in obtaining a grade of plastic with recycled content for food packaging, the most challenging of applications.

Using our proprietary Proesa® tech-

nology at the facility in Crescentino (Vercelli), we have launched the production of advanced bioethanol from residual solid biomasses not in competition with the food chain. Through our technological platform in Porto Torres, we market Sunpower®,

a completely biodegradable herbicide obtained from vegetable raw materials.

Furthermore, 2021 also marked the beginning of our journey as Chief Executive Officer and Chair-

man of Versalis, providing us with the opportunity to work with a team of over 7,000 people who achieve, through their passion and commitment, excellent results day after day, that we are sharing in this report, with all of you.



Marco Petracchini  
*Chairman*



Adriano Alfani  
*Chief Executive Officer*



# Versalis in the world

8,496  
thousands  
of tonnes

of petrochemical  
products

34

Countries of presence

11

Countries in which  
production sites  
are located

Versalis is the Eni chemicals company operating internationally in the fields of **basic** and **intermediate** chemical, **plastics**, **rubbers** and **chemicals from renewable sources**. As part of Eni's broader commitment to the energy transition, the transformation of Versalis into a fully sustainable and diversified chemical company, capable of generating value for all stakeholder and contributing to achieving the aim of carbon neutrality is underway.

Versalis interacts with the markets offering a **broad portfolio of products**, in continuous evolution, for numerous application sectors, as a result of an extensive range of proprietary technologies and continuous research. Commercialisation relies on an extensive global distribution network and after-sales customer service. Lastly, the acquisition of Finproject, a group

active in the specialised applications of polymers, was finalised in October 2021. This transaction makes it possible to extract value from the integration of Finproject S.p.A.'s positioning in the market for high added value applications and the technological and industrial leadership of Versalis.

Versalis is a company in continuous evolution, historically present in **Italy** and **Europe** with various production sites and, following the recent acquisition, has also expanded its production presence in Romania, Canada, India, Mexico and Vietnam. A global sales network makes a widespread and effective customer support possible, as a result of an integrated system capable of meeting the needs of the market with its offering.

Worldwide, Versalis is present in the Asia-Pacific region with its subsidiary Versalis Pacific Trading in

Shanghai, with offices in Mumbai and Singapore; it is also present in South Korea with the LVE Lotte Versalis Elastomers Co. Ltd. joint venture, set up with Lotte Chemical for development in the field of elastomers. Finproject S.p.A. operates in these territories through its subsidiary Finproject Asia.

With its subsidiary Versalis Americas, based in Houston (Texas), the company presides over the North American market - particularly the elastomer business - and the Mexican market. Finproject S.p.A. operates in the same area through its Foam Creations division. Versalis is also present in the African Oilfield Chemicals market in Ghana, Congo, Angola and Mozambique, while in the Middle East it is active in the oilfield sector with VPM Oilfield Speciality Chemicals LLC, in joint venture with Petrochem/Mazru Energy Services.

## VERSALIS' HIGHLIGHTS (excluded Finproject)

14

Production sites  
(of which 2 are a joint venture)

6

Research centres  
(of which 1 is a joint venture)

265

Patent families,  
of which 83 patent families for  
circular products or processes

27%

Employees under 40  
years of age

40%

of the portfolio  
of Sustainability Research  
and Development

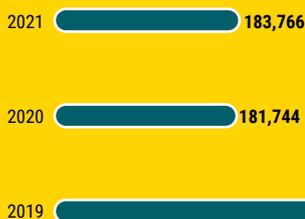
76%

Waste from production  
activities destined for recovery  
and/or recycling

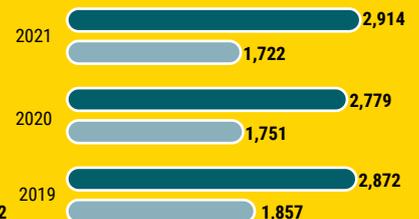
### EMPLOYEES IN SERVICE



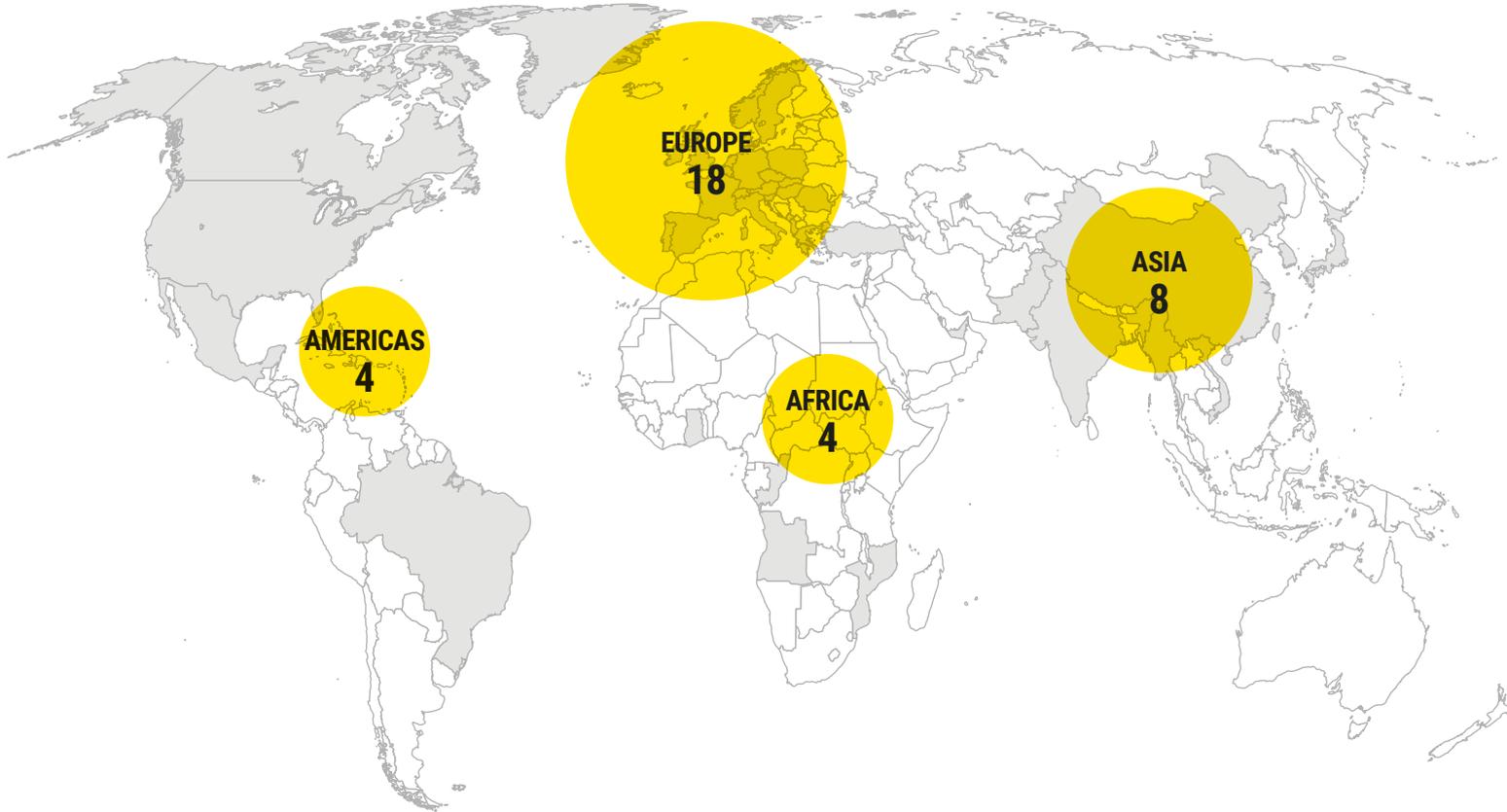
### HOURS OF TRAINING



### EMISSIONS (million tonnes of CO<sub>2</sub>eq.)



● Scope 1 emissions  
● Scope 2 emissions



Countries of presence Versalis

### EUROPE

- AUSTRIA
- BELGIUM
- CZECH REPUBLIC
- DENMARK
- FRANCE
- GERMANY
- GREECE
- HUNGARY
- ITALY
- NETHERLANDS
- NORWAY
- POLAND
- PORTUGAL
- ROMANIA
- SLOVAK REPUBLIC
- SLOVENIA
- TURKEY
- UNITED KINGDOM



### ASIA

- CHINA
- HONG KONG
- INDIA
- KAZAKHSTAN
- SINGAPORE
- SOUTH KOREA
- UNITED ARAB EMIRATES
- VIETNAM



### AFRICA

- ANGOLA
- CONGO
- GHANA
- MOZAMBIQUE



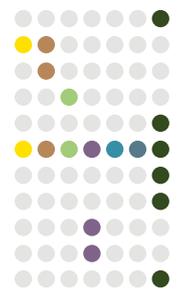
### AMERICAS

- BRAZIL
- CANADA
- MEXICO
- UNITED STATES



### PRODUCTION SITES

- CANADA
- FRANCE
- GERMANY
- HUNGARY
- INDIA
- ITALY
- MEXICO
- ROMANIA
- SOUTH KOREA
- UNITED KINGDOM
- VIETNAM



- Intermediates
- Polyethylene
- Elastomers
- Styrenics
- Biochem
- Polymers from recycling
- Moulding and Compounding

- Headquarters
- Production site
- R&D
- Commercial network

## VERSALIS IN ITALY

## VERSALIS PRODUCTION FACILITIES IN ITALY

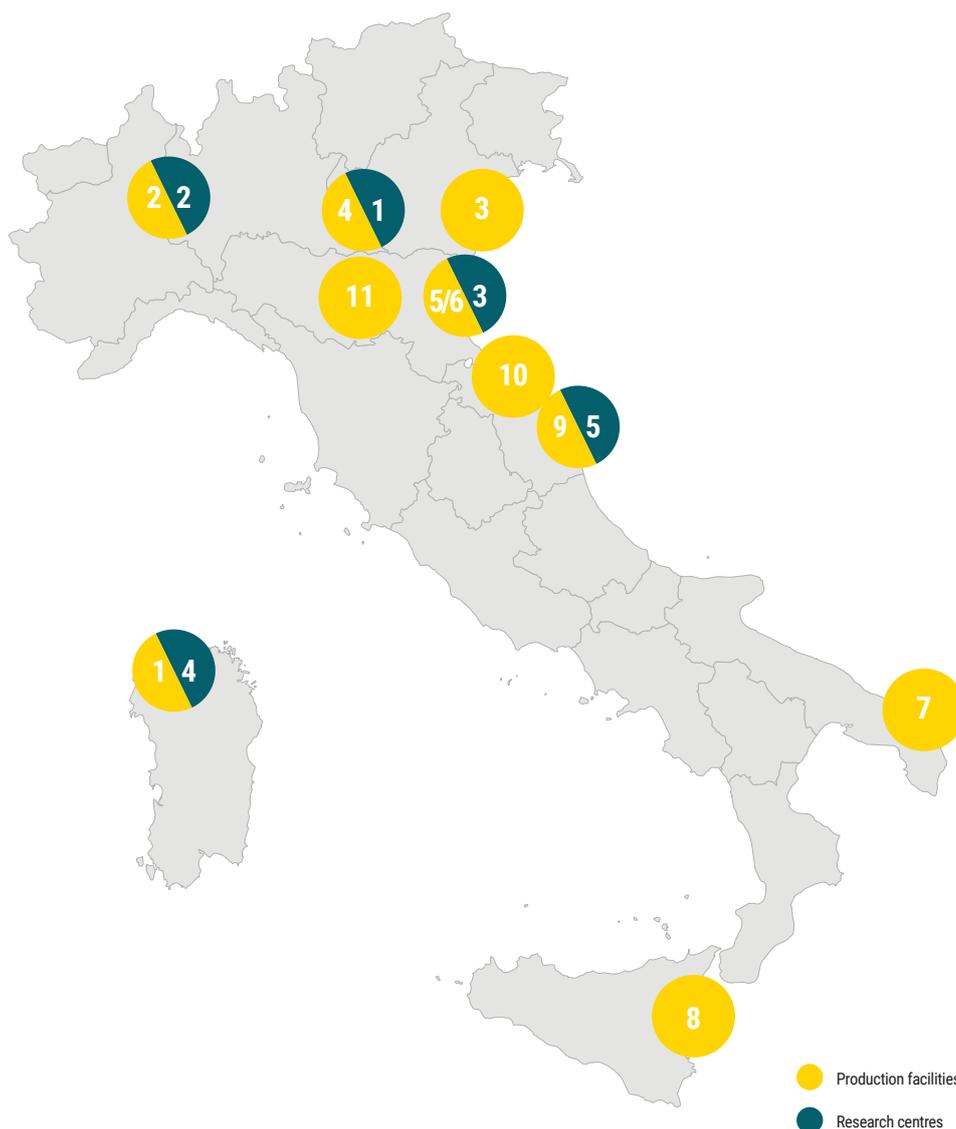
1	<b>PORTO TORRES</b>	Chemical platform from renewable sources of <b>Matrica S.p.A.</b> , a joint venture between Versalis and Novamont S.p.A., for the production of chemical intermediates from renewable sources to be used for the production, for example, of bioplastics, biolubricants, bio agrochemicals, bioherbicides and phytosanitary products. An <b>elastomers</b> plant also operates on the site.
2	<b>CRESCENTINO</b>	Specialising in the production of advanced bioethanol from <b>lignocellulosic biomass</b> , the plant is energy self-sufficient, thanks to the production of renewable electricity and steam from the thermal power plant, which in turn is fuelled by short chain biomass. A complex water treatment plant also enables the water used to be recycled, drastically reducing its consumption.
3	<b>PORTO MARGHERA</b>	Under way the first plant for <b>advanced mechanical recycling of post-consumer plastics</b> , following the acquisition of Ecoplastic's technology and facilities in 2021. Plants will be installed to produce styrene polymers from recycled raw material, which will arrive already sorted and pre-treated. Important logistics hub supporting other production sites.
4	<b>MANTUA</b>	Production plant for <b>intermediates, styrene and styrenics</b> . In particular, the <b>first six thousand tonnes/year chemical recycling demonstration plant</b> will be built at the site, with the aim of a subsequent and progressive scaling-up starting from national production sites.
5	<b>FERRARA</b>	Plant for the <b>production of elastomers and polyethylene</b> . In particular, <b>EPDM rubbers (ethylene-propylene diene monomer)<sup>1</sup></b> destined for, among others, the automotive components industry.
6	<b>RAVENNA</b>	Site for the production of <b>elastomers and butadiene</b> . Portfolio development actions are underway in the plants, with new grades at a higher added value and <b>improved environmental sustainability</b> .
7	<b>BRINDISI</b>	Home to one of the most important steam-crackers, among the best for energy efficiency in Europe and integrated with on-site <b>polyethylene and butadiene</b> production. The Polyethylene unit produces two product families (LLDPE: linear low-density polyethylene <sup>2</sup> and HDPE: high-density polyethylene <sup>3</sup> ), with a technology that guarantees high quality performance.
8	<b>PRIOLO-RAGUSA</b>	Production of <b>polyethylene</b> in Ragusa and <b>steam-cracker</b> plant in Priolo. The latter has been the subject of major investments since 2018, for its reorganization and actions to strengthen the integrated platform.
9	<b>ANCARANO - CASTORANO</b>	Specialising in injection moulding of expandable and cross-linkable materials ( <b>Moulding</b> ). It manufactures ultralight products for major brands in the footwear/fashion and other industries. There is also the internal shopfloor mould, which is responsible for the engineering, design, production and assembly of the aluminium moulds used to make the products.
10	<b>ASCOLI PICENO</b>	Production of rigid and plasticised PVC compounds, Polymer Alloys, Polyolefin-based compounds and over time has expanded its production range by adding cross-linkable and expandable compounds under the brand name Levirex <sup>®</sup> ( <b>Compounding</b> ).
11	<b>ROCCABIANCA</b>	Site specialising in innovative materials based on cross-linkable polyolefins using silane technology. The latter have many applications in particular in the sectors wire&cable, pipes&fittings, e-mobility, PV and in the field of HSRF electric cable materials ( <b>Compounding</b> ).



1 EPDM: family of synthetic rubbers based on the three monomers ethylene, propylene and diene. They have the lowest density of all commercially available tyres.

2 LLDPE: low-density polymer, used e.g. for sacks and packaging films.

3 HDPE: high-density polymer suitable for those applications requiring a higher degree of strength.



## VERSALIS RESEARCH CENTRES

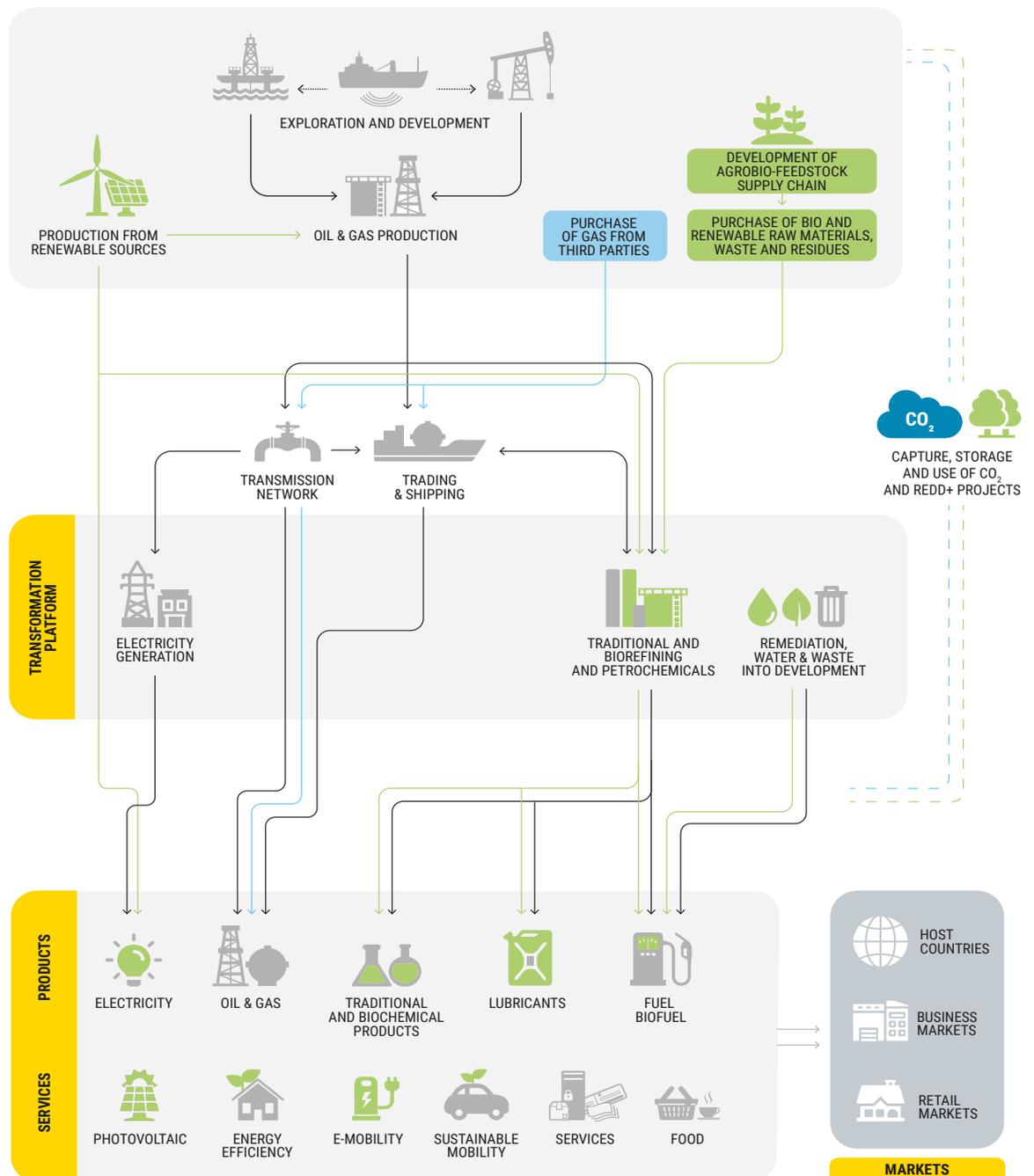
- |          |   |   |
|----------|---|---|
| <b>1</b> | <b>BASIC CHEMICALS AND PLASTICS RESEARCH CENTRE OF MANTUA</b>   | Focused on the development of proprietary technologies and the transversal development of projects related to the different corporate business lines. In recent years, circular economy projects involving chemical and mechanical recycling of end-of-life plastics have been implemented in the centre. |
| <b>2</b> | <b>R&amp;D AND GREEN CHEMISTRY RESEARCH CENTRE NOVARA AND R&amp;D AND GREEN CHEMISTRY RESEARCH CENTRE RIVALTA SCRIVIA</b> | Dedicated mainly to activities in the field of chemistry from renewable sources. Activities focus on topics such as the production of sugars from ligno-cellulosic biomass, the production of bioethanol and biopolymers by fermentation and synthetic chemical intermediates from renewable sources.     |
| <b>3</b> | <b>ELASTOMER RESEARCH CENTRE IN RAVENNA AND FERRARA</b>   | Specialised in the development of elastomeric polymers from both traditional and sustainable sources, the study of their chemical-physical properties and performance in major applications, and the development of rubber production technology platforms.   |
| <b>4</b> | <b>MATRICA S.P.A. RESEARCH CENTRE IN PORTO TORRES</b>   | Created with the aim of optimising the various stages of production processes in Matrica S.p.A.'s plants, providing them with specialist analytical assistance and supporting activities related to process and product development from raw materials of plant origin.                                   |
| <b>5</b> | <b>FINPROJECT S.P.A./PADANAPLAST Srl SITES</b>  | Respectively located in Morrovalle and Roccabianca, where research activities are carried out, have been acquired in the last quarter of 2021 with the aim of creating an all-Italian competence platform about new generation material that can value Versalis and Finproject competencies.              |

# Versalis in the Eni value chain

Eni is a global energy company with a high technological content, engaged in the entire value chain: from the exploration, development and extraction of oil and natural gas, to the generation of electricity from cogeneration and renewable sources, traditional and bio refining and chemical, and the development of circular economy processes.

Eni extends its reach to end markets, marketing gas, power and products to local markets and to retail and business customers also offering services of energy efficiency and sustainable mobility. Consolidated expertise, technologies and geographical distribution of assets are Eni levers to strengthen its presence along the

value chain. Eni is committed to become a leading company in the production and sale of decarbonized energy products, increasingly customer-oriented. Within this context, Versalis operates in the chemical industry to develop intermediates and polymers, as well as chemicals from renewable and recycled sources.



Versalis offers its customers worldwide customized solutions and a dynamic, cutting-edge product portfolio characterized by increasing circularity and renewability. Elements such as the use of innovative proprietary technologies, cutting-edge research and development and a well-established distribution and customer service network enable the company to anticipate market

needs and constantly innovate its offering.

With a total production of around **8.5 million tonnes of products** in 2021, Versalis markets and processes through its **main business areas**.

Versalis aims to provide products that meet customers' needs and expectations, operating in a way that respects the environment, the work-

ers and the communities hosting the production sites. In carrying out its activities, Versalis has a significant impact on the socio-economic realities in which is embedded and, aware of its role within the territories in which it operates, is committed to proactively listening to communities through interactions with local stakeholders, such as institutions, bodies, companies and citizens.

## THE CORE BUSINESS OF VERSALIS



### INTERMEDIATES

Basic monomers derived mainly from the cracking process\*, destined for important industrial uses in downstream supply chains such as plastics, rubber chemicals for the petroleum industry.



### POLYETHYLENE

A polymeric material derived from ethylene and used in the production of a wide range of finished products such as packaging films, bottles, compounds\*\* for civil use and the automotive industry.



### STYRENES

Highly versatile, lightweight plastics with good mechanical properties and high insulating power, used in the production of, for example, industrial and food packaging, insulation, automobile components.



### ELASTOMERS

Polymers that possess elasticity with a variety of applications, such as tyres, footwear, adhesives, components for construction and the automotive industry, additives for plastics and bitumen, and synthetic latex.



### BIOCHEM

The commitment to chemistry from renewable sources is based on the enhancement of the molecular complexity of biological origin feedstock and aims to develop innovative supply chains, technologies and products with a view to decarbonization and circularity.



### SPECIALITY OILFIELD CHEMICALS

Innovative solutions in the field of design, production and supply of chemicals for the petroleum industry, with applications focusing on research and production plant processes.



### MOULDING & COMPOUNDING

Through the acquisition of the Finproject group, a downstream extension of the production chain through the activities of rigid and plasticised PVC compounds, polymer alloys, special Polyolefin compounds and the moulding activities of foamed plastics.

\* In chemistry, cracking is the process for the production of light hydrocarbons through the thermal and/or catalytic breakdown of heavy hydrocarbon molecules.

\*\* Blend of polymers and/or blend of polymers and additives that enable to achieve particular properties of the manufactured product.

# Business model



Eni's business model is focused on **creating value for all its stakeholders** through a strong **presence along the entire energy value chain**. Eni aims to contribute, directly or indirectly, to the achievement of the **Sustainable Development Goals (SDGs)** of the United Nations 2030 Agenda, supporting a just energy transition, which responds with concrete and economically sustainable solutions to the challenges of contrasting climate change and giving access to energy in an efficient and sustainable way, for all.

Eni organically combines its business plan with the principles of environmental and social sustainability and sustainable governance, extending its range of action along three pillars: 1. Operational excellence; 2. Carbon neutrality by 2050; 3. Alliances for development.

Versalis' activities are carried out in line with Eni's three strategic directions:



## OPERATIONAL EXCELLENCE

**1** Operational excellence model is based on the centrality and valorisation of people, safeguarding their health and safety in the workplace, the respect for the principles and development of circular economy models, including through partnerships and alliances with associations dedicated to the subject, commitment to product stewardship and environmental protection.



## CARBON NEUTRALITY BY 2050

**2** In line with the path to decarbonization undertaken by Eni towards carbon neutrality by 2050, Versalis is committed to achieve the energy transition through energy efficiency and greenhouse gas emission reduction activities.



## ALLIANCES FOR DEVELOPMENT

**3** For Versalis, local development embeds a constant and trusting relationship with its customers and collaboration with local stakeholders in order to develop initiatives that have a positive impact also from a social and environmental point of view.



## SKILLS, TECHNOLOGICAL INNOVATION AND DIGITALISATION

Versalis develops its business activities by leveraging specific in-house skills, the research activities and the introduction of innovative tools and technologies, and the digitalisation process.

## VALUE CREATION FOR STAKEHOLDERS

Through an integrated presence all along the energy value chain



**OPERATIONAL EXCELLENCE**

- Health, Safety and Environment
- Human rights & Integrity
- Resilience and Diversification
- Capital discipline

**TRANSFORMATION AND PORTFOLIO FLEXIBILITY**



**CARBON NEUTRALITY BY 2050**

- Life cycle GHG emissions approach (Scope 1, 2 and 3)
- Set of concrete actions for the entire decarbonisation of processes and products

**INTERMEDIATE OBJECTIVES OF NET REDUCTION IN ABSOLUTE TERMS AND OF EMISSION INTENSITY**



**ALLIANCES FOR DEVELOPMENT**

- Dual Flag approach
- Public-private partnerships
- Job creation and know-how transfer

**LOCAL DEVELOPMENT PROGRAMS IN ACCORDANCE WITH THE UN 2030 AGENDA**

COMPETENCIES



TECHNOLOGICAL INNOVATION AND DIGITALIZATION



## Context and global challenges

Achieving the transition to a low-carbon emissions economy cannot be done without the contribution of the chemical industry, a key player for the decarbonization of the supply chain

In the current global context, the fight against climate change and the need to preserve environmental heritage have given rise to an intense process of cultural, social and economic transformation. In Europe, the need to improve its environmental footprint, to stimulate the economic competitiveness of industries and to guarantee the well-being of citizens has led to the development of a complex framework of legislative and non-legislative initiatives, which are still evolving rapidly, aimed at ensuring that Europe can achieve tangible results.

In particular, one of the most challenging objectives formalised in the *Green Deal* is to become the world's first climate-neutral continent by 2050, reducing its climate-altering gas emissions by at least 55% by 2030<sup>4</sup> thus revolutionising all social and economic models, from energy to transport, construction and the whole industry.

In parallel and in combination with previous initiatives, the Commission launched the *Circular Economy Action Plan 2.0*<sup>5</sup> which aims to overcome the concept of a 'take-make-dispose' economy and spread the principles of a regenerative econ-

omy. Through various actions, the plan focuses on prevention and optimal waste management and promotes growth, competitiveness and overall EU leadership in the various industrial sectors, with the aim of accelerating the *"transition towards a regenerative growth model that gives back to the planet more than it takes, advance towards keeping its resource consumption within planetary boundaries"*<sup>6</sup> thereby decoupling economic growth from the use of finite, non-renewable resources.

Furthermore, the *Chemical Strategy for Sustainability* aims at European industry being a globally competitive player in the production and use of safe and sustainable chemicals and proposes actions that support innovation, promotes the protection of human health and the environment, simplifies and strengthens the regulatory framework for chemicals, and creates new awareness and knowledge.

The decarbonization of processes and products is imperative not only to meet climate sustainability targets, but also to achieve greater independence and flexibility on energy

and material procurement sources, competitive and strategic factors considered to be key.

The chemical industry, closely interrelated with the main industrial sectors, is called upon to needs to play a key role in this transition process: on the one hand, it has to be fast and dynamic in response to increasing (European and national) regulatory compliance, and on the other hand, it has to lead the downstream sectors by proactively anticipating market demands, innovating and investing in research, and promoting concrete solutions for the sustainability of the entire supply chain. In line with this context, Versalis strategy focuses not only on the research and innovation for the development of high-tech solutions to reduce process emissions, but also to continue to deliver safe and high-performance products, maximising at the same time resource efficiency and product sustainability at all stages of the life cycle, thanks to the use of alternative and renewable raw materials and to the chemical and mechanical polymers recycling.

➤ **Chemicals strategy**

### MAIN ROUNDTABLES IN WHICH VERSALIS IS INVOLVED AT EUROPEAN LEVEL



4 Compared to 1990.

5 A first European Circular Economy Action Plan was launched in 2015.

6 European Commission, Circular Economy Action Plan, 2020.

# Main events of 2021

FEBRUARY

Versalis obtains ISCC PLUS certification for monomers, intermediates, polymers and elastomers produced with sustainable raw materials, from bionaphtha and chemical recycling, at the Brindisi, Porto Marghera, Mantua, Ferrara and Ravenna plants.

APRIL

Versalis launches **Revive® PS Air F - Series Forever**, product for food packaging made with 75% domestic post-consumer polystyrene.



MAY

**New railway siding** constructed on the Versalis plant site in Mantua to transport KA oil (chemical intermediates) to Radici Chimica S.p.A. in Novara.

JUNE

Versalis and Saipem signed an agreement to internationally promote PROESA®, Versalis' proprietary technology used to produce **sustainable bioethanol** and chemicals from lignocellulosic biomass.



SEPTEMBER

Versalis acquires on an exclusive basis the **technology and plants** of Ecoplastic S.p.A., as a step forward for the construction of the advanced **mechanical recycling hub** in Porto Marghera.

SEPTEMBER

Versalis acquires 60% of the shares of **Finproject S.p.A.**, an Italian company leader in the compounding sector and in the production of **ultralight products**, (following the initial acquisition of a 40% share in July 2020), raising its stake to 100%.



OCTOBER

Versalis markets **Sunpower®**, the **broad spectrum herbicide from renewable sources**, biodegradable and for professional use only.

OCTOBER

Versalis takes part in **Ecomondo 2021 – The Green technology EXPO**.

DECEMBER

Versalis and **BTS Biogas** agree to develop and commercialise an innovative **technology for the production of biogas and biomethane** from residual lignocellulosic biomass.



## Just Transition for Versalis



“

For a chemical industry, pursuing the transition involves the implementation of a path of transformation through strategic projects developed in order to support a zero-emission economy and foster the development of the social fabric and the prosperity of the territories in which it operates.

| ADRIANO ALFANI - CHIEF EXECUTIVE OFFICER |

Within the Just Transition framework, Eni clearly expresses its commitment to contribute positively to the transformation of the current energy and economic system, always taking into account the social repercussions of these changes: a fundamental prerequisite of this approach is a human rights management system, developed and consolidated over the past few years, which is also applied to activities particularly affected by transition.

Versalis, in line with Eni strategy, has for some years now embarked on its own path of transformation

aimed at implementing a fair and equitable transition, rethinking the growth, in an inclusive manner, of the entire chemical production chain. In line with the global scenario and the guidelines of the main evolving frameworks, Versalis wants to give impetus to the creation of an industrial development model that takes into account not only the opportunities towards a zero-emission future, but also the related social challenges. This is possible thanks, on the one hand, to the development of specific businesses in the areas of circularity and chemistry from renewable sources while, on the other hand,

to the responsible management of impacts associated to company's production assets.

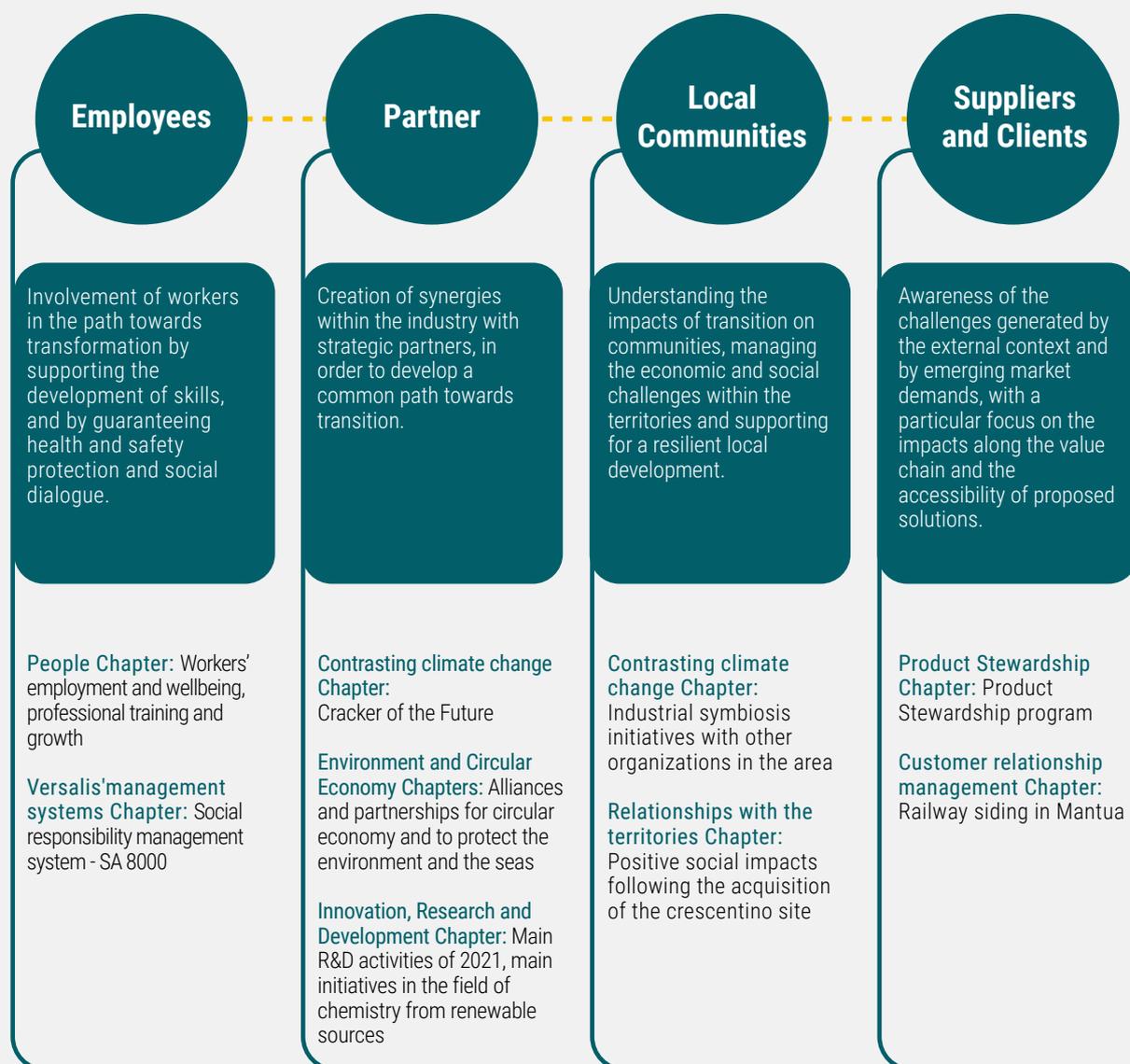
The key element is the active engagement of all actors involved in the transition. Versalis, through up-to-date internal technological and engineering skills, the dialogue with social partners along the entire value chain, the development of strong and renewed collaborations with strategic partners, and the creation of synergic projects to support territories, shares a common path of transformation with all stakeholders.

■ **For more information: see Eni for 2021 A Just Transition**



## VERSALIS' APPROACH

**Precondition: active dialogue with all actors involved in the transition path**



These specific initiatives are added to those connected to the major structural changes in Versalis' business:

- ▶ Re-configuration of Crescentino site for the production of bio-ethanol from lignocellulosic biomass;
- ▶ Transformation plan of the Porto Marghera site, including the construction of an advanced mechanical recycling hub for plastics;
- ▶ Transformation of the petrochemical site in Porto Torres into an integrated chemical platform from renewable sources.

All these initiatives have a strong connotation of "Just Transition" as, in addition to favoring the development of an integrated chemical platform from renewable sources and the diffusion of low-emissions and circular solutions, they have allowed and will keep in the future, the conversion of current professional profiles, the creation of new jobs and the development of new activities in the territories of presence.

# Governance and risk management

Versalis is subject to Eni's direction and coordination and its Corporate Governance is structured according to the traditional model, implying a clear separation between management responsibility and supervisory functions thus to comply with the principles of integrity and transparency. Following the guidelines of the Parent Company, the responsibility for business management is assigned to the Board of Directors - notwithstanding the tasks of the Shareholders' Meeting -, the supervisory functions are carried out by the Board of Statutory Auditors and the statutory audit functions are assigned to independent auditing company.

As of January 1, 2021, Versalis assumed a new organizational structure, with 5 support functions reporting to the Chairman, while the 4 Business Units and 6 other support functions report directly to the Chief Executive Officer.

With reference to risk management, Versalis has adopted the Integrated Risk Management Model developed by Eni, aimed at ensuring that Management makes informed

decisions, taking into adequate consideration current and prospective risks, including both medium and long term risks, within a consistent and dynamic vision. In particular, in 2021 Versalis participated to two risk assessment cycles and three main risks monitoring cycles. The Versalis Top Risk portfolio, updated to the Interim Risk Profile assessment carried out in the first half of 2021, consists of 7 risks, divided in external, strategic and operational.

For more information: see Eni for 2021 A just transition

## SUSTAINABILITY GOVERNANCE

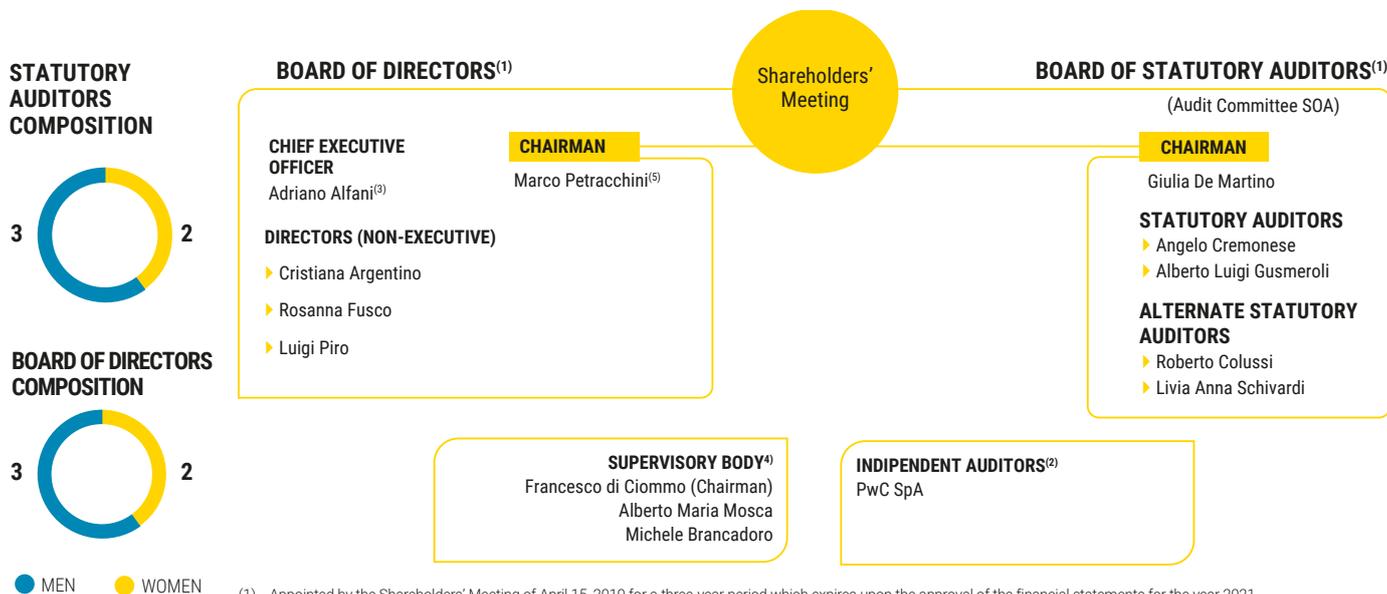
The new reorganization adopted in 2021 also entailed significant changes in sustainability governance. In particular, the Circular Economy and Sustainability function came under the direct authority of the Chief Executive Officer, making the issue one of the elements of constant comparison and dialogue of top management during the periodic executive meetings. The re-

sponsibilities of the function itself were also broadened and redefined to better represent the company's priorities and, consequently, facilitate the implementation of the company's strategy.

The commitment to specialisation also in line with the energy transition is also reflected in the Variable Incentive Plans for company management. The Long-Term Equity Incentive Plan 2021-2023 (ILT) and Short-Term Incentive Plan with Deferral 2022 (IBT) support the implementation of the strategy through parameters related to the objectives of decarbonization, energy transition and circular economy.

In line with the commitment related to people safety, the objective on personnel safety is confirmed to be measured through the Severity Incident Rate (SIR) index, which aims to focus Versalis' commitment on the reduction of the most serious accidents, as it measures the frequency of total accidents registered in relation to the number of hours worked, attributing increasing weights with the severity level of the accident.

## CORPORATE BODIES



(1) Appointed by the Shareholders' Meeting of April 15, 2019 for a three-year period which expires upon the approval of the financial statements for the year 2021.

(2) Appointed by the Shareholders' Meeting of July 11, 2018 for a three-year period which expires upon approval of the financial statements for the year 2021.

(3) Appointed by co-option by the Board of Directors of December 23, 2020 with effects from January 1, 2021.

(4) Organizational Notice N°5/2021 of December 22, 2021.

(5) Appointed by co-option by the Board of Directors of February 1, 2021.

# Versalis' management systems

Versalis, in order to ensure proper management of its business and contribute to contrasting climate change together with guaranteeing operational excellence in the performance of its activities, decided to adopt since its founding, management systems certified according to international standards. Versalis adheres to **Responsible Care®**, a voluntary program set up to promote sustainable development in the global chemical industry, according to values and conduct oriented towards safety, health and the environment, within a more general framework of corporate social responsibility.

The program takes form at chemical site level, through the adoption

of procedures and conduct beyond regulatory requirements. One of the guiding principles is to cooperate with competent authorities and bodies to promote criteria to improve performance in terms of corporate social responsibility.

At Versalis, the continuous improvement of sustainability performance is also measured and managed through an internationally recognised Corporate Social Responsibility (CSR) rating system defined by EcoVadis, an independent international agency specialised in the assessment of the sustainability of organizations.

The Versalis Corporate Social Sustainability Assessment, together with relevant publicly available information, is assessed annually in

four areas (Environment, Labour and Human Rights, Ethics and Sustainable Procurement), then analysed and expressed through a synthetic rating that indicates the company's ability to meet sustainability and transparency requirements.

Versalis has confirmed its GOLD rating for several years and in 2022 was awarded the PLATINUM rating, the highest category available for the assessment issued by EcoVadis, positioning itself among the top 1% within the industry. This result confirms the constant attention Versalis devotes to managing sustainability issues, integrating good practices into its own management systems for corporate processes.



All Versalis production sites operate in accordance with the principles of Responsible Care®. The performance of companies adhering to Responsible Care® is on average higher than the chemical sector's positioning in all areas of interest

## MANAGEMENT SYSTEMS IN PLACE

### INTEGRATED HEALTH, SAFETY AND ENVIRONMENT MANAGEMENT SYSTEM - ISO 45001 AND ISO 14001

To guarantee that all activities, processes and services meet the requirements of applicable HSE regulations; the scope covers all direct and indirect workers, activities and workplaces of Versalis.

All Italian and foreign production sites\* and the headquarters in San Donato Milanese have certified management systems according to ISO 45001 (Health and Safety) and ISO 14001 (Environment)

### QUALITY MANAGEMENT SYSTEM - ISO 9001

To provide products and services that not only comply with customer and regulatory requirements, but also with a view to continuous improvement of its processes. The Quality Policy is updated periodically and defines the organization's commitments to integrating quality in all corporate processes and areas of the company.

All Italian and foreign production sites and the headquarters in San Donato Milanese have ISO 9001 (Quality) management systems

### ENERGY MANAGEMENT SYSTEM - ISO 50001

It identifies a set of operative procedures to ensure the reduction of energy impact and the improvement of plant continuity.

All Italian and foreign production sites\*\* have ISO 50001 (Energy) management systems

### SOCIAL RESPONSIBILITY MANAGEMENT SYSTEM - SA 8000

Versalis has adopted a Social Responsibility Policy and implemented a Management System compliant with the SA 8000 standard for all its activities in Italy\*\*\*, which integrates the efficiency of its business activities with respect for the principles of sustainable development.

**For more information Versalis Social Responsibility**

Versalis publishes its annual Social Report according to SA 8000 standard, which reports the objectives and results achieved by the company in the areas covered by the standard

### ASSET INTEGRITY MANAGEMENT SYSTEM

Versalis has defined an Asset Integrity Management System that allows, through a risk analysis, the identification of critical items, management procedures and maintenance policies.

The application of the management system has allowed Versalis to supervise its plants in an integrated and structured manner.

\* Excluding the Crescentino site, for which both are planned by 2022.

\*\* Excluding the Crescentino site, which is scheduled for certification by 2023.

\*\*\* With the exclusion of the Crescentino site, which will implement it by 2023.

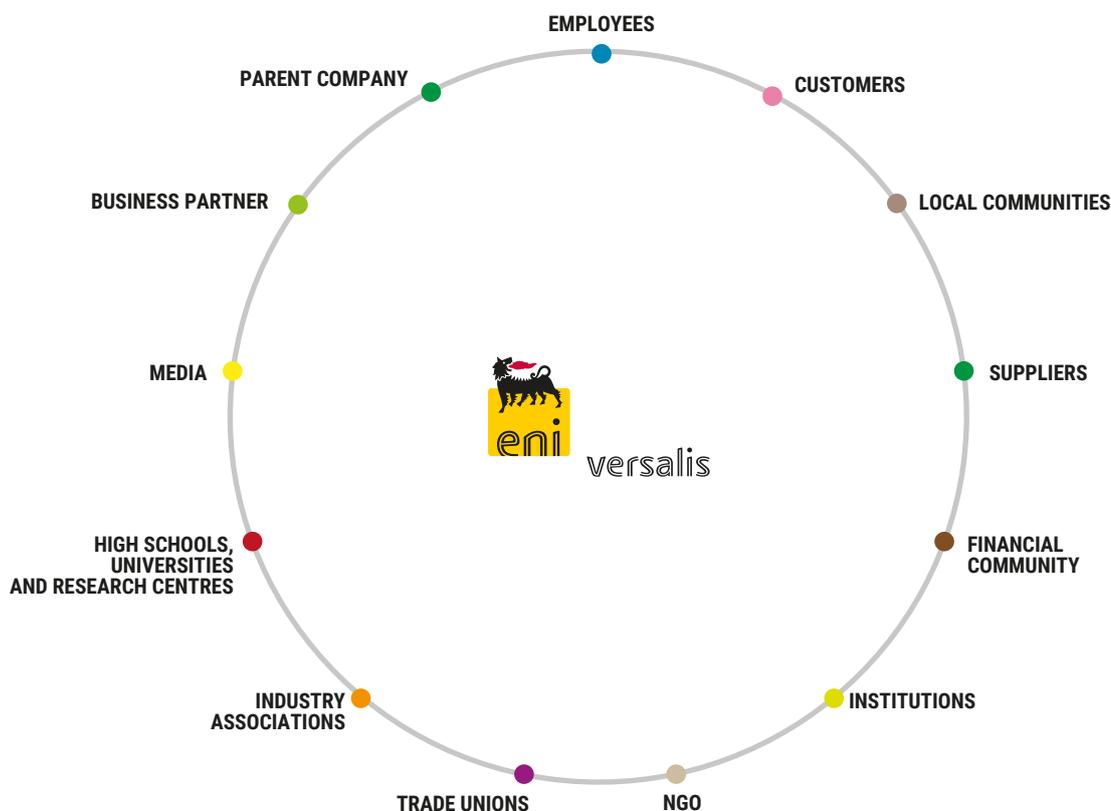
## Stakeholder engagement activities

Versalis, operating in countries with different social, economic and cultural contexts, **considers dialogue and direct involvement of stakeholders to be fundamental to the creation of shared value.** Openness to listening and mutual exchange, inclusiveness, understanding of stakeholders'

views and expectations as well as the sharing of decisions, represent fundamental elements for the Company to build lasting relationships based on mutual trust, transparency and integrity.

In order to map the main groups of stakeholders considered key for Versalis, have been identified

those categories with which the Company is cultivating an open transparent and on-going relationship over time, in order to increase trust, consensus and therefore improve decision-making processes in the pursuit of development and enhancement objectives.



### FOCUS ON

#### ENI STAKEHOLDER MANAGEMENT SYSTEM

At Versalis, the Stakeholder Management System covers all production sites, with the exception of the Crescentino site, for which implementation methods are currently being studied

The Stakeholder Management System (SMS) is an Eni corporate tool implemented in all its business lines, aimed at supporting stakeholder management in the territories where the companies operate. It consists of a web-based platform that allows you to:

- i) identify, classify and analyse stakeholders in the countries and territories of presence;
- ii) track the interactions that have taken place and any requests they express or might express;
- (iii) trace the response actions implemented or planned to meet the demands that have arisen.

In addition to its basic purposes, the system provides a series of further support tools, useful for instance for analysing possible criticalities, the traceability of information related to the relationship and the representation of the evolution over time of the degree of criticality.

To date, the SMS has been implemented at all Italian - with the exception of the Crescentino site - and foreign Versalis sites.

In order to improve the stakeholder relations management process, the tool is constantly evolving, and its update is aimed at better supporting complaints management activities (Grievance Mechanism), planning stakeholder engagement actions and tracking interactions with relevant persons as required by internal anti-corruption regulatory instruments.

## MAIN STAKEHOLDER ENGAGEMENT ACTIVITIES

### EMPLOYEES

- Direct involvement in **recovery and recycling activities of plastic products** which are used daily (RiVending project).
- **For more information: see Circular Economy p. 52**
- **Professional and training courses** on the emerging skills related to business strategies and expansion of skills mapping.
- Training initiatives to support **inclusion and recognition of the value of all kinds of diversity** and international initiatives supporting team building and innovation.

### HIGH SCHOOLS

- Agreements for the development of **specific training plans** with two Piedmont secondary schools involving the development of programmes reserved for students enrolled in years III and IV, started during the school years 2019/2020 and 2020/2021 with the following arrangements:
  - Class III: information on the company organization (Biochem Business Unit operation);
  - Class IV: specific projects for the development of transversal skills (problem solving, communication, team working).
- During 2021, despite the momentary interruption of activities undertaken with local schools, Versalis maintained **active channels of communication for the development of future collaborations** in the school sector.

### UNIVERSITIES AND RESEARCH CENTRES

- Definition of **framework agreements**, in cooperation with Eni, with leading Italian universities, including the University of Padua, Milan Polytechnic, National Inter-University Consortium for Materials Science and Technology - INSTM, National Research Council - CNR.
- **Technical dialogue tables** aimed at ensuring an effective transition towards the achievement of sustainable development goals (e.g. Data Science in Industry 4.0 project in cooperation with SMICT Competence Centres in Triveneto).
- Continuous **networking of scientific contacts with international research groups** of excellence in the field of plastics and elastomers (e.g. participation in Horizon Europe and LIFE meetings, publication of articles in industry journals).
- Speeches by **15 experts R&D Versalis** as part of training activities, coordinated by Eni Academy, in technical seminars held for various Italian universities.
- Training and involvement activities on topics related to the Circular Economy at several universities, including the Politecnico di Milano, the Politecnico di Bari and LUISS.

### INDUSTRY ASSOCIATIONS

- Active participation in **congresses, industry conferences and trade associations** which promote collaboration with universities, research centres and leading national and international associations (Federchimica, PlasticsEurope, CEFIC, Confindustria).

### PLAYERS IN THE CHEMICAL INDUSTRY AND PRODUCERS OF END-USE APPLICATIONS

- Meetings with the main players in the chemical industry aimed at familiarising the market with the activities carried out by Versalis in relation to ISCC PLUS certification.

### TRADE UNIONS

- On-going comparison and transparent dialogue, particularly in the most important phases of change involving workers and the company.
- Meeting with the **National Sectoral Secretariats** and a delegation of trade union representatives of the registered office and plants, during which the CEO and Chairman of the Company illustrated the corporate development strategy .
- **Close cooperation between the company and trade union organizations** and on-going dialogue at local level with **workers' representatives** to promote participative management of the health emergency.
- Second-level negotiations and the subsequent **signing, in addition to the definition of annually recurring issues such as working hours and participation bonus, of specific agreements** at the Brindisi and Mantua sites aimed at reshaping working hours and organizational models during the plant shutdown period.

## Material topics for Versalis

For the definition of the topics to be reported within the Sustainability Report, Versalis carried out in 2021 a **materiality analysis aimed at identifying and prioritising the issues considered relevant to its business and stakeholders**. These issues are defined as “material”, i.e. relevant as they reflect the economic, social and environmental impacts of the organization and can influence stakeholder assessments and decisions. In order to identify the list of potentially relevant issues for Versalis and the sector in which operates, a preliminary analysis was carried out that considered:

- **internal documentation:** internal strategic guidelines, Survey reputation, Stakeholder Manage-

ment System issues, customer satisfaction surveys;

- **benchmarking:** analysis of the material topics of major companies operating in the same sector;
- **external context:** analysis of current and emerging topics for the chemicals sector (GRI Standard, SASB, ESG ratings), as well as evaluation of the main global risks identified by the World Economic Forum (Global Risk Report 2021).

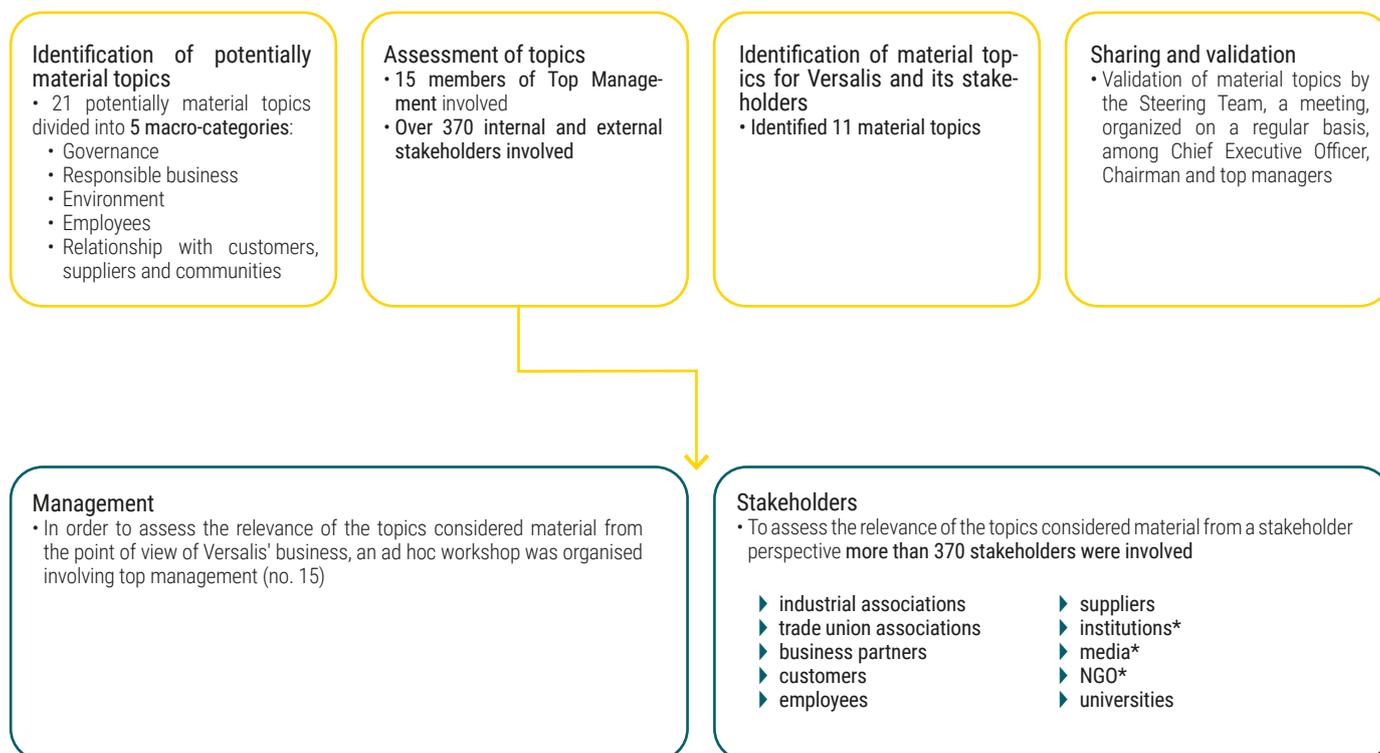
The preliminary analysis resulted in a list of potentially material topics, which were submitted to be assessed by both top management and a sample of stakeholders. In particular, the former expressed their evaluation through

an internal workshop, while the latter through an online questionnaire. The comparison and analysis of the votes cast led to the identification of **11 material topics** for Versalis.

For more information: see [Eni's Stakeholder Management System p. 20](#)

Versalis conducted its materiality analysis during 2021, a year still affected by the COVID-19 health emergency. In this sense, the issue of Health Emergency was included among the topics considered as most relevant for the Company and its stakeholders, due to the effects generated and the continuation of the external context conditions related to the pandemic.

### PROCESS FOR DEFINING MATERIAL TOPICS



\* The questionnaires were filled in by those employees responsible for managing relations with these stakeholder groups. The results were considered as proxies.

## MATERIAL TOPICS FOR VERSALIS

	<b>CARBON NEUTRALITY BY 2050</b>	<b>CONTRASTING CLIMATE CHANGE</b>	GHG emissions Energy resource management	9 12 13 17
	<b>OPERATIONAL EXCELLENCE</b>	<b>PEOPLE</b>	Diversity, equal opportunities and inclusion Employment and well-being Professional training and growth	3 4 8
		<b>SAFETY</b>	Health and safety in the workplace Product Stewardship Asset integrity	3 4 8 9 12
		<b>ENVIRONMENT</b>	Air quality Waste management Water resource management	3 6 9 12 13 14
		<b>CIRCULAR ECONOMY</b>		9 12 13 17
		<b>RESPONSIBLE PROCUREMENT</b>		8 17
	<b>ALLIANCES FOR DEVELOPMENT</b>	<b>RELATIONSHIP WITH THE TERRITORY</b>		8 17
		<b>CUSTOMER RELATIONSHIP MANAGEMENT</b>		8 17
	<b>CROSS-CUTTING TOPICS</b>	<b>INNOVATION AND R&amp;D</b>		9 12 13 17
		<b>TRANSPARENCY IN BUSINESS MANAGEMENT</b>		8 17
		<b>INTEGRATION OF ESG FACTORS INTO THE BUSINESS STRATEGY</b>		3 4 6 8 9 12 13 14 17
		<b>HEALTH EMERGENCY</b>		3 9



# Versalis' commitment to sustainability

Versalis, together with respecting the context in which it operates, **wants to play a key role in the economic transition towards the development of a model for sustainable growth**, based on the integration of circularity principles in processes and products management, throughout the entire life cycle.

Versalis pursues the following stra-

tegic directions, consistent with the Sustainable Development Goals (SDGs) defined by the United Nations:

- the **specialisation of the portfolio** towards products with high performance and high added value;
- the **further development of chemistry from renewables** with new processes and products;
- **circular economy initiatives** in-

cluding through the development of products from chemical and mechanical recycling;

- the progressive **reduction of greenhouse gas emissions**, increasing energy efficiency and investing in low-carbon technologies;
- **optimisation of internal processes** to improve resilience to scenario changes.

## COMMITMENTS

### CARBON NEUTRALITY BY 2050

#### CONTRASTING CLIMATE CHANGE

Versalis in line with Eni's strategy, contributes to long-term Carbon Neutrality objectives, aiming to achieve net-zero by 2050.

Versalis is also committed to promote the development of chemistry from renewable sources, as well as the identification of alternative sources of feedstock that are certified and sustainable, to progressively increase research and development activities dedicated to decarbonization, and to implement solutions aimed at reducing the energy impact and improving the continuity of production at its plants.

Versalis is also focused on reducing its own direct and indirect emissions from the production of utilities purchased from companies outside the Eni Group. The target Versalis is committed to achieve is a 25 per cent reduction in total Scope 1 and 2 emissions from companies outside the Eni Group by 2025 compared to 2018 and a 40 per cent reduction of these by 2035 compared to 2018.

**SDG: 9, 12, 13, 17**

### OPERATIONAL EXCELLENCE

#### PEOPLE

Versalis recognises the centrality of people in its operating model and is committed to supporting the growth of specific in-house skills through customised training courses and guaranteeing an inclusive and responsible working environment capable of enhancing diversity and protecting physical, psychological and social well-being.

**SDG: 3, 4**

#### SAFETY

Versalis considers the protection of safety an indispensable value and is proactively committed to guaranteeing the safety of its personnel and ensuring asset integrity in order to safeguard business continuity and promoting responsible product development.

**SDG: 3, 9**

#### CIRCULAR ECONOMY

Versalis is committed to develop a business model supporting the transition to a sustainable and circular chemistry by defining the following objectives:

- as part of recycling and feedstock diversification, up to 100,000 tonnes of polyolefin-based compounds containing up to 70% post-consumer polyolefins and up to 20,000 tonnes of styrene polymers containing up to 50% recycled product;
- in circular packaging for shipping our products, 50% of the polyethylene packaging will contain up to 50% recycled material and will be further recyclable and/or reusable.

**SDG: 9, 12, 13, 17**

#### ENVIRONMENT

Versalis promotes the efficient use of natural resources and the protection of the environment, through the responsible management of water resources used in production processes, the increase of waste sent for recovery and/or recycled and the protection of air quality and the management of emissions into the atmosphere.

**SDG: 3, 6, 9, 12, 13**

### ALLIANCES FOR DEVELOPMENT

#### RELATIONSHIPS WITH THE TERRITORY

Versalis is committed to establish lasting relationships of mutual trust with its customers, raising market awareness on the use of sustainable products and establishing strategic partnerships to enhance local businesses and support the development of territories.

**SDG: 8, 17**

# Innovation, Research and Development



Versalis' on-going commitment to product and process innovation is the fundamental prerequisite for maintaining and strengthening its competitiveness and leadership position.

At Versalis, Research, Technology and Process Engineering operate in synergy with each other, draw-

ing directly from the skills of its own resources, reducing the lead time of each new process and developing proprietary technologies that strengthen its competitive advantage, while at the same time favouring the realisation of complete solutions to be proposed to its business partners. In 2021, research

and technological innovation in line with previous years activities, were focused on the improvement of processes and products of existing business lines and the development of new technological platforms, with a strong commitment to sustainability and the circular economy of the entire production chain.

## PROMOTING RESEARCH THROUGH SKILLS DEVELOPMENT

At the heart of Versalis' innovation are ideas and people: Versalis relies on a team of around **400 resources, including researchers and technologists**, serving in the Research Centres, organised into departments, with specific technical-scientific skills, who can count on an extensive external network of contacts and collaborations with leading Italian and foreign universities, as well as with prestigious private research institutes. People at Versalis are characterised by a wide variety of skills, approaches and training that facilitates the exchange of experience and know-how, within a context in which diversity becomes inclusion and stimulation. The female presence within the research has increasingly become a constant, reaching **more than 30% of female managers or executives within the R&D perimeter**.

### B3 - BE EXPERT, BE-COME NETWORK, BUILD THE FUTURE

A project developed to stimulate the **creation of transversal connections within the R&D function**, to understand the importance and **synergy opportunities generated by the network** in which the function operates, and to understand the essential value of an R&D activity carried out effectively on Versalis and Eni results and strategies. The project took place through webinars, interviews and **classroom sessions**.

### #RICERCIAMOCI

The establishment of an internal communication team to **gather the input received from R&D personnel** downstream of the B3 project, the result of which the #Ricerchiamoci project was organised, based on the motivational cycle that each employee faces within their own work context: identification in the values of the Company, creating distinctive elements, being aware of the achievements in research, feeling like the protagonists of change and be a spokesperson for others.

### R&D TRAINING - IDEAS AND TOOLS FOR GROWTH AND CHANGE

The launch of an extensive **internal technical** remotely driven training plan structured on the basis of **employees' training needs**, collected through an **internal survey**, which saw a very high participation of more than 70% of R&D personnel.

**10 training sessions** were held by both internal lecturers and lecturers from the Research and Technological Innovation Unit involving up to **150 people** mainly from the R&D perimeter, but open to all Versalis technicians. The topics covered included, among others, Versalis' proprietary technologies, the technological challenges of the future with a focus on CO<sub>2</sub> capture and storage, recycling supply chains and polymer material recovery activities.

About 400 employees, 30% of whom are female managers or executives within the R&D

62% of employees under the age of 50 work in R&D activities

## FOCUS ON

## DIGITAL INNOVATION FOR BUSINESS RESILIENCE

Increasing business complexity together with increasing regulatory requirements, forces companies to learn to **adapt quickly and dynamically**. Various actions have been taken by Versalis to respond in an agile manner to the challenges of the external environment: from improving the efficiency of **recursive activities** - such as conducting remote audits for management system purposes - to **improving the effectiveness of strategic activities** - such as the use of innovative tools for process monitoring.

Furthermore, the use of data fusion techniques makes it possible to achieve **prompt control of product and process quality** by combining data generated by classic plant sensors with information collected in real time through NIR (Near Infrared Reflectance) sensors, currently installed in the polymer production plants of the **Mantua plant** and in an intermediate plant of the **Priolo plant**.

Through the application of advanced analytics tools, a pilot project was launched to perform **predictive and preventive maintenance analysis** on production equipment. Finally, in 2021, the Crescentino site developed in-house with its TECON structure a dashboard using the Power BI application for **real-time monitoring of the plant's main management parameters**.



## Patents and licensing

265 patent families as at December 2021, 283 in 2020, each referring to a single invention

83 patent families protect inventions related to circular/sustainable products and/or processes

Versalis' portfolio of patents and proprietary technologies spans the entire field of chemical intermediates and polymers obtained from traditional raw materials, renewable sources or recycling. As the operator of petrochemical plants through its in-house research and development centres, Versalis develops proprietary technologies to be applied both in its own production plants and under licence from other players, anticipating the needs of an evolving market.

In order to protect itself and operate competitively in the markets in which it is present, **Versalis is careful to protect its innovations and intellectual property through a diversified patenting strategy** covering all its business lines: Biochem (formerly Biotech) which also includes Specialty Oilfield Chemicals, Styrenes, Elastomers, Polyethylene and Intermediates. Versalis' patent portfolio is constantly evolving to meet market demands and process and

product technological developments. In particular, the evolution of the portfolio in recent years has been the result of a specific activity of rationalisation implemented in order to proactively respond to the challenges of the industrial context and to be more focused on new areas of innovation and sustainability.

In addition to patent protection, Versalis protects its own identity and that of its products and technologies through its own



7 The variation in the number of patent families is due to the registration and acquisition of new patents, the natural expiry and periodic rationalisation of the patent portfolio. In particular, 13 new patent applications were filed in 2021, with a focus on energy transition and plastics recycling.

brand portfolio, which, by guaranteeing exclusive use, contributes to the differentiation and characterisation necessary for its market success.

The brands protected within the portfolio belong to all business lines with increasing protection of sustainability-related brands. For Versalis, technology licensing represents a strategically important element in the valorisation of its intellectual assets and know-how developed in the various business areas.

As with patents, the portfolio of licensed technologies cuts across all business areas and, in the majority of cases, has solid references in its production facilities. This allows the Company to offer its licensed customers **tangible guarantees in terms of reliability**, ensuring that they can not only benefit from the most up-to-date technology, but also take advantage of additional commercial support and technical assistance. Licensing, in this perspective,

enhances and strengthens Versalis' image of technological excellence and also becomes a lever for its international development through targeted partnerships. Finally, from a technological point of view, the presence of and competition with the best available solutions on the market represents a permanent stimulus for process and product innovation, thus positively reflecting on the long-term sustainability of the entire commercial offer.

Over 50 licences sold as at 2021

- 20 Elastomers
- 16 Polyethylene
- 10 Intermediates
- 8 Styrenes



# Carbon neutrality by 2050



Eni's business model envisages a decarbonization path towards carbon neutrality by 2050 based on an approach focused on emissions generated throughout the life cycle of energy products and on a set of actions that will lead to the total decarbonization of processes and products by 2050.

Versalis is committed to contribute to the virtuous path towards carbon neutrality through the diversification of raw materials, both from renewable sources and from recycling, focusing on product and process technological innovation, and on targeted actions to improve efficiency of consumption and emissions, always looking at the entire life cycle of chemical products.

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# Contrasting climate change



## VERSALIS' COMMITMENT

In line with Eni's strategy, Versalis plays a key role in the virtuous circle towards carbon neutrality by 2050. Our business model is strongly oriented towards a careful assessment of the consumption and emissions generated throughout the entire life cycle of chemical products, with continuous investment in product and process technological innovation, in order to reduce the overall impact on the environment.

| ADRIANO ALFANI - CHIEF EXECUTIVE OFFICER |

## POLICIES AND OTHER REGULATORY INSTRUMENTS

Eni's responsible engagement on climate change within business association; Policy "Sustainability"; Eni's position on biomass; Strategic plan 2022-2025; Eni Code of Ethics.

## MANAGEMENT AND ORGANIZATION MODELS

Energy management systems coordinated with the ISO 50001 standard, included in the HSE regulatory system, to improve energy performance; already implemented in all the main Mid-Downstream sites and currently being extended to the whole of Eni; Organization of research and technological development aimed at the creation and application of low-carbon technologies, in full integration with renewable sources, to the use of biomass and the enhancement of waste materials in reference to their possible application in the process of redefining the energy mix, as well as the development of technologies for the use of new forms of energy or energy carriers with reduced or zero carbon footprint.

Versalis, in line with Eni's strategy, pursues the goal of Carbon Neutrality by 2050, through the promotion of chemistry from renewable sources, the identification of alternative sources of feedstock that are certified and sustainable, the adoption of solutions aimed at reducing the energy impact, and the increase of research and development activities dedicated to decarbonization.

Specifically, Versalis is committed to achieving a 25% reduction in Scope 1 and 2 emissions from companies outside the Eni Group by 2025 (vs. 2018) and a 40% reduction of these by 2035 (vs. 2018)



## Chemistry from renewable sources

One of the pillars within the strategy, which is based on innovation, is the diversification of raw materials, including the renewable ones. This pillar is fundamental also due to the ability to contribute to carbon neutrality objectives in the long term and concretely face global climate challenges. Through the Biochem Business Unit, Versalis is committed to strengthening its competitive positioning in the renewable chemistry sector by developing integrated technology platforms that uses lignocellulosic biomasses, vegetable oils and/or sugars as raw materials. Chemistry from renewable sources, in fact, refers to those processes and technologies capable of transforming raw materials from renewable sources into chemical products.

Research on chemistry from renewables is carried out at the research and development centres in Novara and Rivalta Scrivia. Here, the main activities are aimed at the improvement of the **proprietary industrial technology PROESA® for the conversion of biomass** (not

competing with the food chain) into second-generation sugars for their following fermentation to bioethanol. The latter forms the basis for the development of new technology platforms for the production of chemicals from renewable plant-based raw materials such as biopolymers, biocide formulations, bases and additives for biolubricants.

Another important supply chain is the production of natural rubber and resins from the Guayule shrub, a plant native to the Mexican desert/Arizona, as a sustainable alternative to the production from *Hevea brasiliensis*. Versalis signed an agreement with Bridgestone to create synergies and accelerate the development of the technological platform from Guayule, using their pilot plant and farm in Arizona.

Furthermore, with the Matrica S.p.A. joint venture in Porto Torres (Sardinia) Versalis has created, in line with Just Transition principles, an innovative platform of chemis-

try from renewable sources for the production of biointermediates for high added value applications (e.g. bioplastics, biolubricants and bioherbicides), in line with the circular economy model.

Confirming its ongoing commitment to innovation, Versalis enters the market of products of agriculture protection from renewable sources. Thanks to the agreement with AlphaBio Control® - a company specialised in natural formulations for crop protection with its products already well known in the plant protection market - Versalis has developed herbicides and biocides for plant-based and biodegradable surface disinfection, using the production of active ingredients from the renewable chemical platform in Porto Torres. The commercialisation of the new herbicide formulation in both the agricultural and industrial sectors has started in Italy, with the aim of further extending the portfolio with new formulations, which are currently being studied in their own research laboratories.

### FOCUS ON

#### BIOETHANOL PRODUCTION AT THE CRESCENTINO PLANT

At the Crescentino (Vercelli) site, started in 2021 the production of bioethanol defined 'advanced', i.e. obtained from lignocellulosic biomasses, not in competition with the food chain: the bioethanol produced is certified as advanced following the ISCC-EU (International Sustainability & Carbon Certification) scheme in compliance with the Renewable Energy Directive (RED II).

**For more information: see Circular Economy p. 52**

This certification guarantees the sustainability of the process throughout the entire supply chain, from the raw material consisting of residual biomass sourced close to the plant, to the production of bioethanol and its use as a renewable component in fuel. The Crescentino site is therefore the first example of industrial application of the proprietary PROESA® technology and best interprets the concept of sustainable, renewable and circular production.

Furthermore, on February 16 2022, always at the Crescentino plant, the restart of cellulosic ethanol production, i.e. second-generation ethanol, was announced.

## MAIN INITIATIVES IN THE FIELD OF CHEMISTRY FROM RENEWABLE SOURCES

### VERSALIS AND BTS BIOGAS TOGETHER FOR BIOGAS AND BIOMETHANE PRODUCTION

In December 2021, Versalis entered into a collaboration with **BTS Biogas**<sup>9</sup> to develop and market an innovative technology for the production of biogas and biomethane from **lignocellulosic residual biomass**. This technology will be based on the integration of Versalis proprietary technology for the thermomechanical pre-treatment of biomass with BTS Biogas' technology for the production of biogas and biomethane. As a result of the new technology, the main objective of the collaboration is to allow the **production of biogas and advanced biomethane with high yields starting from residual lignocellulosic biomass, with reduced greenhouse gas emissions and without agronomic impact**.

### SUNPOWER THE HERBICIDE FROM A RENEWABLE SOURCE

Production and commercialisation of the **Sunpower** formulation, a **renewable source herbicide** with broad-spectrum action that combats annual and perennial weeds in urban, agricultural and non-agricultural environments, started in 2021. Sunpower is authorised by the Ministry of Health as a **plant protection product** for professional use only, and is **biodegradable**.

The effectiveness of the product has been demonstrated by numerous pre-marketing activities conducted with several wine growers in central and northern Italy and through tests conducted with green maintenance companies at selected municipalities and Eni industrial sites. Furthermore, **research activities were initiated to optimise the application protocol** of the herbicide for uses already permitted on the label and to verify the effectiveness of the product in new applications.

### MATRICA AND LANXESS FOR THE PRODUCTION OF BIOCIDES FROM RENEWABLE RAW MATERIALS

In January 2022, Matrica S.p.A., a Versalis and Novamont S.p.A. joint venture, announced an agreement with LANXESS, a leading speciality chemicals company, in the **production of biocides from renewable materials**. The Matrica plants in Porto Torres (Sassari) will supply raw materials from renewable sources obtained from vegetable oils that LANXESS will use in the production of a new series of industrial additives with biocidal action, which will expand the Preventol range of products.

The agreement will therefore enable the production of sustainable biocides to be increased and meet the growing market demand.

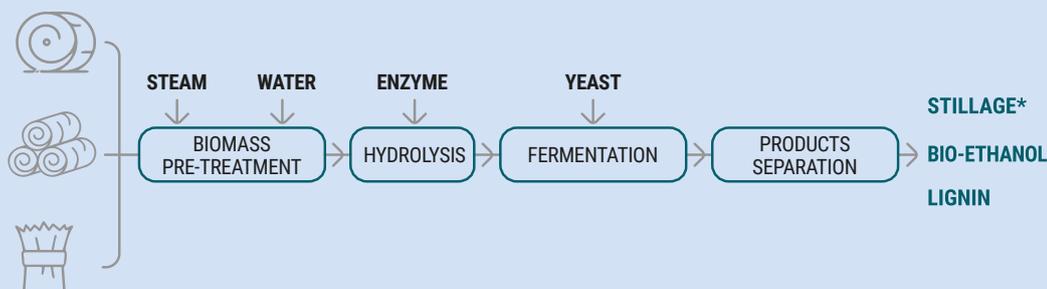
## FOCUS ON

### PROESA TECHNOLOGY®

The proprietary PROESA® technology is considered a Key Enabling Technology in the field of chemistry from renewable sources as it enables the transformation of lignocellulosic biomasses - and in particular residual biomasses that do not compete with the food chain - into lignin and second-generation sugars. The latter form the basis of any fermentation process capable of converting these sugars into specific chemical compounds that can be used in a variety of sectors, from biofuels, as in the case of ethanol, to consumer products, such as biopolymers. Lignin, from being a co-product initially intended for combustion, is now being used as a raw material for various applications, exploiting its potential without chemically modifying it during the process, making this natural polymer particularly suitable for numerous applications such as paints with biocide properties, bitumen and thermo-plastic composites.

PROESA® technology offers significant advantages, being:

- Flexible, in terms of raw material and positioning;
- Competitive, from an economic-financial point of view;
- Guaranteed, as it is backed by performance guarantees based on critical parameters;
- Sustainable, as Versalis is committed to continuous improvement to remain an industry leader and provide further value to its clientele.



\* Waste from the distillation phase.

9 Italian company active in the design and construction of biogas production facilities.

## Circular economy at the service of decarbonization

In 2020-2021, Versalis obtained ISCC PLUS certification for all production sites for monomers and intermediates, polyethylene, styrene polymers and elastomers

Together with the chemistry from renewable sources, the development of the circular economy is also a key decarbonization lever for Versalis. In fact, developing circular solutions makes it possible to avoid emissions on the one hand, associated with the use of virgin raw materials by reusing resources already present in the value chain and, on the other, to avoid emissions associated with traditional disposal processes, favouring their reintroduction into the production cycle and generating climatic and environmental benefits along the entire value chain.

In this area, as a result of its valuable partnerships, know-how and industrial experience, Versalis is highly committed to the continuous technological development of both existing and new solutions. An example of this is **Hoop®**, the project carried out in partnership with the engineering company Servizi di Ricerche e Sviluppo (S.R.S.), which has enabled the development of a

chemical recycling technology for the transformation of mixed plastic waste into secondary raw material. At present, Versalis is committed to setting up an initial demo plant with the aim of subsequently increasing its scale.

Another important step in the decarbonization process, inspired by the principles of Just Transition, is the transformation of the Porto Marghera site, which, through numerous initiatives, including the construction of a major hub for advanced mechanical recycling of plastics, will allow a cut in CO<sub>2</sub> emissions from the Versalis site of around 600,000 tonnes/year.

Alongside the Versalis Revive® range of products with recycled content derived from mechanical recycling, Versalis has also developed the Balance® range, a family of products made from alternative raw materials - both renewable and recycled - used alongside traditional raw materials. The guarantee of sustainability

requirements and product traceability is possible thanks to ISCC PLUS certification, the voluntary certification scheme developed by ISCC (*International Sustainability & Carbon Certification*), which makes it possible, through mass balance approach, to **assign the sustainable characteristics of alternative raw materials to final products**.

Versalis has obtained for all sites the ISCC PLUS certification with *Voluntary Add-on 205-01, GHG emission requirements* for the assessment of greenhouse gas emissions released by the supply chain for the production of Balance® grades. Finproject S.p.A. is also in the process of obtaining ISCC PLUS certification, after obtaining the certification of 3 Italian production sites in 2021 (Ascoli Piceno, Castorano (AP) and Ancarano (TE)).

For more information: see [Circular Economy p. 52](#)

Versalis includes voluntary assessment of GHG emissions for all production sites that have achieved ISCC PLUS certification

### ADD-ON GHG EMISSIONS, THE VOLUNTARY CALCULATION TOOL OF GREEN HOUSE GAS EMISSIONS

Versalis, one of the first organizations in the industry, has voluntarily integrated the 'Add-on GHG Emissions' calculation tool, checked by an independent third party in accordance with the ISCC EU System 205 'Greenhouse Gas Emissions' document, which allows the **calculation of GHG emissions for all products ISCC PLUS certified**.

This tool is the result of Versalis' desire and commitment to be able to quantify and monitor the effects of actions to reduce the environmental impact in terms of greenhouse gases of its products. Furthermore, the tool will be used to provide downstream users of ISCC PLUS products with timely information for their own assessments.



## ISCC PLUS CERTIFICATION: A CONCRETE AND TANGIBLE SIGNAL TOWARDS CIRCULARITY

**Raw materials are the starting point for a circular economy, and the market is increasingly demanding them to be safe and sustainable. How do you support manufacturers to achieve this objective?**

The market is increasingly guided in its choices by environmental and ecological considerations. We see every day how end consumers are becoming more and more sensitive to these issues: they demonstrate this when evaluating the purchase of any type of product, especially if it involves plastic products. When we think of plastic, the first image that comes to mind is that of a bottle, but in reality, there are many other types of product to which this attention

should be paid. That is why it is important to strengthen the company's reputation and image in the eyes of consumers. Certifying raw materials, makes it possible to move closer to this objective.

In a company such as Versalis, certifying the supply chain and commercialization for biomass-derived products makes it possible to guarantee the protection of the biodiversity of natural resources, preserving them from transformation in areas subject to agricultural exploitation. The certification of the supply chain and commercialization of products deriving from recycled content, on the other side, makes it possible to guarantee the real use of recycled material.

### What are the key principles around which the ISCC PLUS standard is built and what benefits does it deliver?

Based on a solid and well-documented set of rules, the ISCC PLUS standard

allows you to monitor and be able to demonstrate the sustainability of your products through the control of dedicated requirements, traceability and mass balance throughout the supply chain. Certification provides benefits such as expanding one's range of sustainable products, accessing new markets and strengthening competitive positioning.

In summary, ISCC PLUS is the international reference scheme in the field of products with circular and sustainable characteristics. This is evidenced by the increasing number of companies certified according to this scheme. The fact that more and more companies are applying for ISCC PLUS certification further increases the credibility and reliability of this standard in the entire value chain. This certification guarantees traceability along complex supply chains and offers consumers total transparency of sustainability declarations.



Interview with **Paolo Moretti**  
Chief Executive Officer of RINA Services.

## RESEARCH AND DEVELOPMENT ALLOWING FOR SYNERGIES BETWEEN CIRCULAR ECONOMY AND DECARBONIZATION

Versalis's commitment to contribute to long-term carbon neutrality objectives is also realised through its Research and Development activities and the innovative projects developed by the company aimed at realising the synergic benefits between the circular economy and decarbonization. In 2021, these activities have been mainly focused on the production of new materials and the creation of innovative products composed of high percentages of recycled material, acting on circularity and efficient use of primary resources.

More specifically:

- **ELASTOMERS:** in cooperation with AGR, development of products for the automotive sector, which enable high performance and a reduction in the amount of CO<sub>2</sub> produced in the life cycle of manufactured goods;
- **POLYETHYLENE:** a new line of compound products with more than 70% post-industrial consumption recycled raw material marketed under the Versalis Revive® PE brand for shrink film and packaging applications;
- **STIRENICS:** pilot-scale development, with continuous mass technology, of new polystyrene grades containing up to 30% secondary raw material.



\* Europe's leading player in post-consumer plastic recovery and recycling technologies.

\*\* Mixture between polymers and/or between polymers and additives to achieve particular properties in the final product.

## GHG emissions and energy resource management

### +29%

electricity production from renewable sources realised in 2021, at the Crescentino site

The chemical sector differs from other industrial sectors in its use of fossil resources both as raw materials and as energy sources: their progressive reduction in favour of **fuels and raw materials with a lower carbon footprint** therefore represents an element of absolute importance for Versalis.

In carrying out its activities and those of its suppliers, **Versalis undertakes to contribute to achieving the objectives of plant efficiency and reduction of direct emissions, promoting the use of**

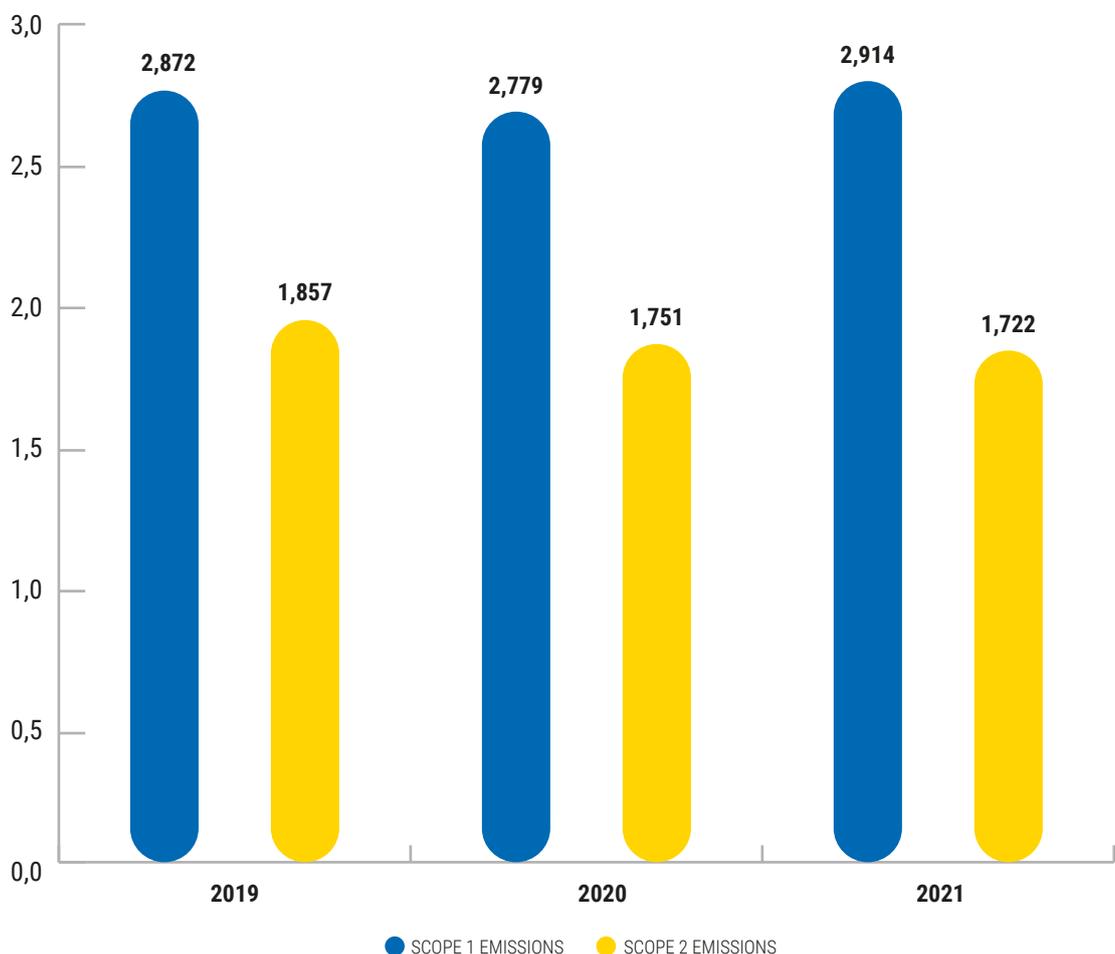
**an energy mix with reduced carbon content** and a constant commitment to research and development, minimising environmental impacts and optimising the use of natural energy resources.

Furthermore, the biomass power plant at the Crescentino site also allowed for an annual production of more than 70 GWh of electricity from renewable sources, increasing of about 29% the 2020 production.

With respect to GHG emissions in 2021, Versalis' activities gen-

erated **4.64 million tonnes of CO<sub>2</sub>eq**, of which, 63% relate to direct emissions (Scope 1) while the remaining relate to indirect greenhouse gas emissions from electricity and heat consumption (Scope 2). During the course of the year, Versalis took another important step on the path to decarbonization: **Top management** was involved in a series of workshops aimed at identifying possible new decarbonization levers to support the definition of decarbonization objectives.

GHG EMISSIONS (million tonnes of CO<sub>2</sub>eq)\*



\* GHG scope 1 emissions included are CO<sub>2</sub>, CH<sub>4</sub> e N<sub>2</sub>O.

## Emission reduction and energy efficiency initiatives

Versalis is committed to the transition to a low-carbon economy, contributing to the Eni 2050 carbon neutrality objective. In particular, since 2011 the Company has been implementing projects and initiatives with the main objective of process energy efficiency and minimising emissions.

**Energy efficiency is one of the pillars of the energy transition: by reducing specific GHG emissions, we aim to improve the sustainability performance of all businesses.** At Versalis, energy performance improvement opportunities are assessed with a systemic approach. When designing new processes or re-designing existing ones, a dedicated study is carried out to assess the impact on energy performance; subsequently, the results are continuously monitored through Energy Management Systems.

In the field of development projects, **cost analysis is integrated with the LCA (Life Cycle Assessment) approach to find the ideal life cycle trade-off between environmental and economic performance.** This assessment, based on the forecast scenarios, is carried out in accordance with the following principles:

- reducing consumption of fossil raw materials by compensating with the use of renewable raw materials;
- applying the strategy of re-using equipment and systems where possible for different industrial sites;
- promoting the procurement of 'green' raw materials and energy from renewable sources.

The choice of energy recovery measures to be implemented on production sites is made accord-

ing to the corporate criteria for the approval of investments, following dedicated company procedures involving technical-economic assessments. Once approved, all identified energy improvement opportunities are included in the Versalis Energy Management Systems' improvement plans.

As of December 2021, energy-saving projects in place have resulted in saving approximately 52,000 toe (tonnes of oil equivalent), of which around 75 per cent from primary energy<sup>10</sup>. The reduction in energy consumed resulted in a total of 109.85 kt of avoided direct CO<sub>2</sub> emissions (+34% compared to 2020), mainly attributable to the efficiency upgrades at the Priolo and Porto Torres plants, and a total of 38.4 kt of avoided indirect CO<sub>2</sub> emissions, slightly down compared to 2020.

# 30

energy efficiency measures in place in 2021

### FOCUS ON

#### VERSALIS ENERGY SAVING PROJECTS

Over the past decade Versalis has carried out numerous energy **efficiency measures** that have enabled and still enable the achievement of important results in terms of consumption reduction (up to 100 kt/year). The savings in the final costs of **30 interventions** will be active and monitored in 2021.

Among the interventions planned in the 2022-2025 period, following the COVID-19 emergency and the consequent revision of investment plans, some projects have had their commissioning schedules postponed. For the four-year period identified, two new projects on the Ravenna plant related to energy optimisations on the production process, which are currently scheduled to come into operation in 2023, will enter the plan. On the Priolo, Brindisi and Mantua sites, the projects already identified in 2020 are confirmed and whose entry into operation will take place starting from next year. Among these, the thermal integration project planned at the Mantua plant has also been awarded Energy Efficiency Certificates in accordance with current Italian energy efficiency regulations.

With the completion in 2025 of the measures currently in the Plan, it will be possible to achieve energy savings of about a further 16,500 toe/year, corresponding to about 40kt of CO<sub>2</sub>eq (mainly indirect).

10 Primary energy: fuel.

## FOCUS ON

**VERSALIS PARTICIPATES IN CRACKER OF THE FUTURE TO ACCELERATE ENERGY TRANSITION**

In September 2021, Versalis announced its entry into the **European Cracker of the Future consortium**, which aims to accelerate the development of an innovative technology for the **electrification of the steam-cracking process**, thus enabling a substantial reduction in greenhouse gas emissions. In the petrochemical industry, the term “steam-cracking” refers to a process through which hydrocarbons (in the form of natural gas or naphtha) are liquefied into commodities (e.g. ethylene, propylene and aromatics), which are used in the production of a wide variety of everyday chemicals, including medical applications, food packaging, wind turbine polymers, solar panels and batteries. However, the steam-cracking process requires a **significant amount of energy**: today, European crackers emit about 30 million tonnes of CO<sub>2</sub> annually (about 20-25% of the greenhouse gas emissions of the entire European chemical industry), most of which comes from the furnaces.

In this context, the consortium is jointly investigating how naphtha or gas steam-crackers could be **operated using renewable electricity** instead of fossil fuels: in combination with other energy conversions, electric cracking with renewable energy can **largely eliminate the greenhouse gas emissions** generated. Furthermore, electric crackers will be able to convert bionaphtha and pyrolysis oil from waste plastics and thus foster industry synergies and enable circular economy processes.



## Industrial symbiosis initiatives with other organizations at local level

Activities supporting the sustainability of the business include those associated with energy exchange synergies at Versalis sites. Energy consumption has a significant impact on Versalis' chemical production, which is why **the electricity and thermal energy** required for production activities is mainly **supplied by high-efficiency cogeneration plants**, or by **systems using renewable sources such as biomass or photovoltaics**.

The majority of Versalis production sites see, in the area in which they are located, the presence of a large cogeneration plant serving the industrial centre of which they are part. High-efficiency cogeneration plants allow simulta-

neous generation of electricity and heat, saving fuel compared to separate production of the two vectors. When electricity is generated by burning a fuel, part of the energy released by combustion is converted into electrical energy while another part is converted into heat, which is dissipated. Cogeneration systems **recover heat** and use it to cover heating needs, **reducing environmental impact**, as well as **guarantee energy availability** that is not always provided by other sources.

The possibility of having networks to exchange energy surpluses from Versalis chemical processes is a further element of **intra and inter-company energy integration and optimisation**.

This aspect favours the maximisation of energy recoveries, through the 'reuse' of recovered sources. Energy exchange synergies, in fact, are present in all main Versalis production sites for both import and export: for instance, at the Brindisi site, high-pressure steam recovered from cracking is exported to the EniPower power plant to be transformed into electricity, or at the Priolo site, self-produced steam from internal recoveries is exported to other Versalis departments and to third parties.

The application of thermal recovery offers multiple benefits such as primary energy savings, reduced environmental impact and CO<sub>2</sub> emissions.

**High-efficiency cogeneration plants enable the simultaneous generation of electricity and heat**

**Within the majority of Versalis production sites, a large cogeneration plant is installed, serving the whole industrial centre of which they are part.**



# Operational excellence



Eni's business is constantly focused on operational excellence. This translates into an ongoing commitment to valuing people, safeguarding both the health and safety of people and asset integrity, protecting the environment, integrity and respect for human rights, resilience and diversification of activities and guaranteeing sound financial discipline. These elements allow the company to seize the opportunities related to the possible evolutions of the market and to continue on the path of transformation. Versalis, in line with Eni's values, recognises the fundamental importance of guaranteeing the operational excellence of its business, taking care of its resources and activities through safety and asset integrity, promoting environmental protection and the spread of the circular economy, and operating with integrity and transparency throughout its value chain.

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# People



## VERSALIS' COMMITMENT

"People are the most important resource for us, as they are the ones who support and spread values and culture in the territories where we operate and allow, through their skills, to achieve challenging business goals. The successes achieved to date are the direct result of the passion and skills of our people, an asset in which we continue to invest. That is why we are committed in guaranteeing the health and safety of our people and those who work with the company, and to building a working environment free of any form of discrimination or harassment, based on fair and decent working conditions, open dialogue and valuing diversity."

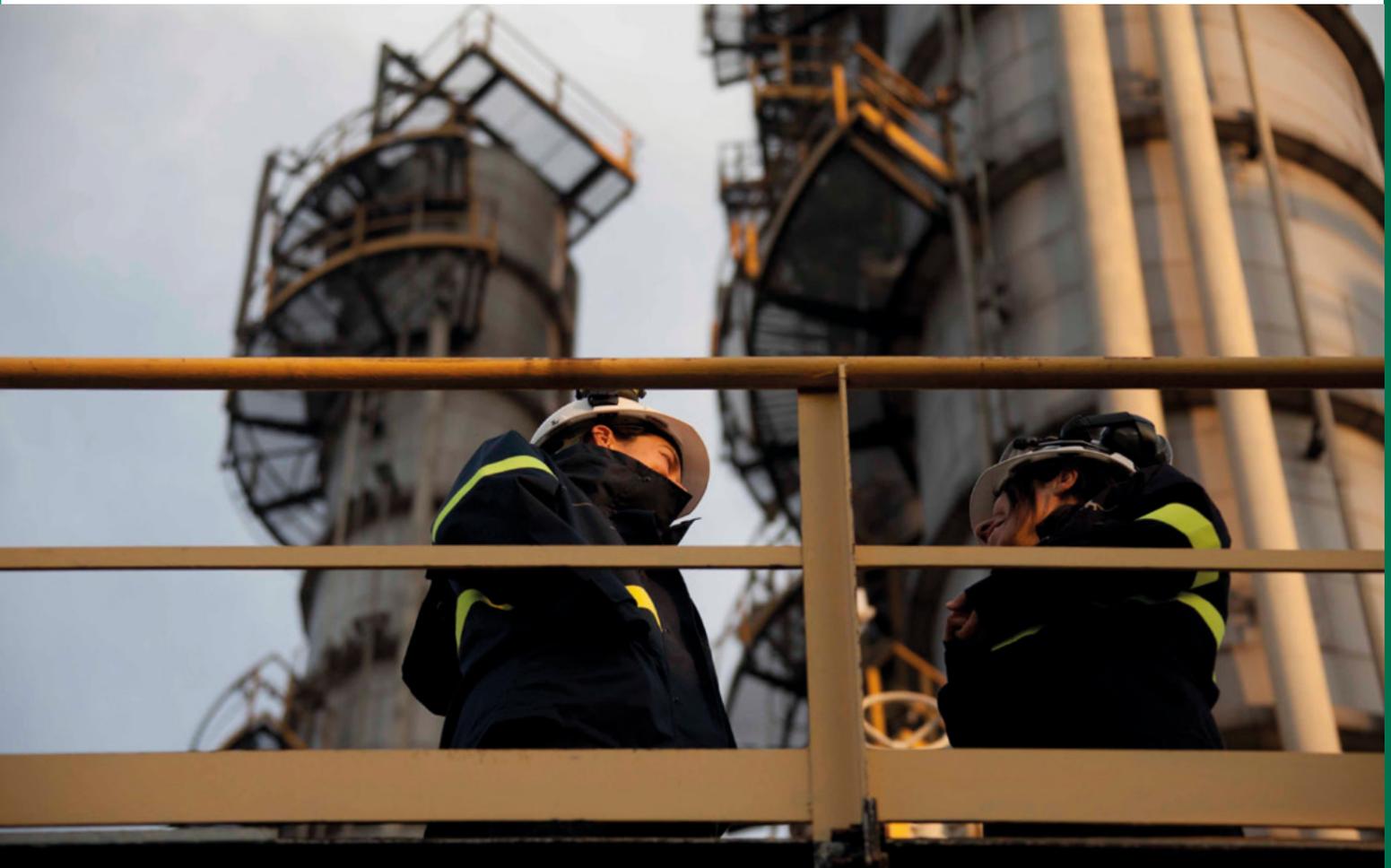
| DAVIDE CALABRÒ - HEAD OF HR BUSINESS PARTNER |

## POLICIES AND OTHER REGULATORY INSTRUMENTS

"Our People" and "The Integrity in Our Operations" policies; Eni's statement on Respect for Human Rights; Eni Policy Against Violence and Harassment at Work; Eni Code of Ethics.

## MANAGEMENT AND ORGANIZATION MODELS

HR management and planning process to align skills to technical-professional needs; Tools for management and development; Innovative tools for HR Management; Support and development of competencies in line with company strategies (focused on energy transition and digital transformation, also using Faculty/Academy); Training quality management system in accordance with the ISO 9001:2015 standard; Knowledge management system for know-how sharing; System for managing industrial relations at the national and international level; Welfare system for work-life balance and enhancement of services to employees and their families; Management system for social responsibility conforming to SA8000.



5,129

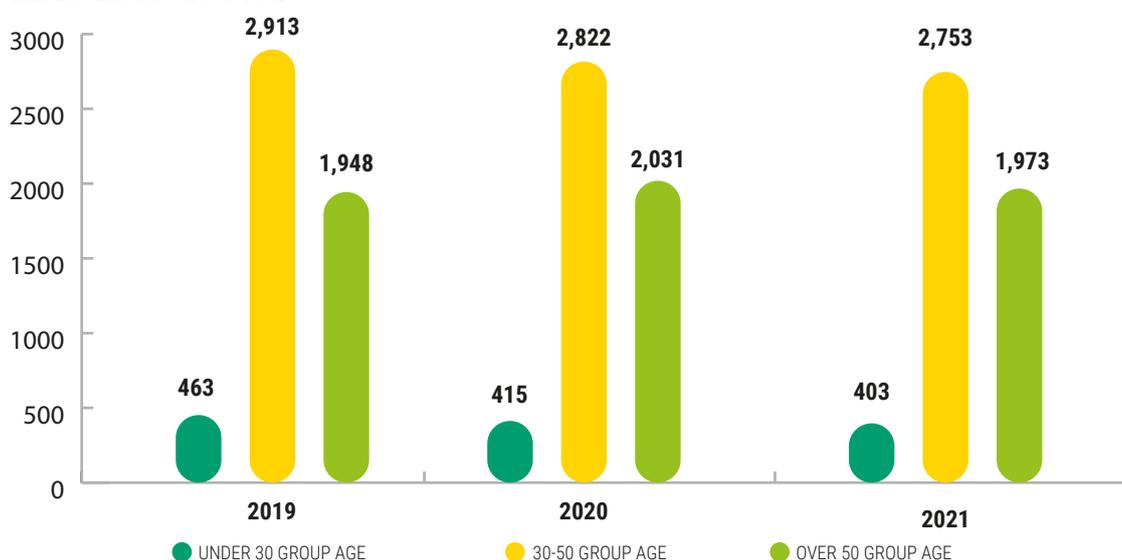
employees from  
36 nationalities**WORKERS' EMPLOYMENT AND WELLBEING**

People are the fundamental asset of Versalis, as it is only through their commitment, dedication and professionalism that objectives can be achieved.

Total employment as of 31.12.21, Finproject S.p.A. excluded, was 5,129 people, of which 4,115 in Ita-

ly (80% of employment) and 1,014 abroad (20% of employment), a decrease of 139 resources compared to 2020, mainly related to a business scenario subject to the healthcare emergency. In the fourth quarter, the consolidation of Finproject S.p.A. into Versalis took place: as of 31.12.2021 Finproject employed 429 resources in Italy and 1,517 abroad.

During the year, 60 permanent hires were made in Italy. Of these, 18.3 per cent were female personnel and about 90 per cent involved employees under 40 years of age. Abroad, on the other hand, a total of 85 new entries were recorded, of which 22.3 per cent were female personnel and 67 per cent were under 40 years of age.

**EMPLOYEES BY GROUP AGE****FOCUS ON****HUMAN FOCUS INTRODUCED IN 2021**

**CONTEXT:** The challenge of the energy transition requires the commitment and involvement of all Eni personnel, who must develop new personal skills as well as a new self-awareness and "sense" of team and community development.

**PROJECT:** 2021 saw the introduction of Human Focus, Eni's new Capability and Personal Behaviour model, with which functional capabilities were identified to make each employee an accelerator of change and a driver of Eni's evolution towards an energy company. Among these: openness to new things, as a stimulus to the desire and courage to learn and innovate; the ability to read complexity, critically analysing problems; the ability to act proactively and seize opportunities; the ability to re-invent oneself and make decisions in the face of uncertainty; the ability to develop a climate of mutual trust; the need to take responsibility and feel part of corporate responsibility, working on self-awareness.

**APPLICATION:** Human Focus is applied in all management and development processes and enables an assessment of behaviour and capabilities, consolidating strengths and working on areas for improvement. The implementation process was supported and complemented by (i) a widespread internal communication and training campaign; (ii) an alignment of assessment methodologies; (iii) the use of digital tools dedicated to training to develop personal skills and encourage the most effective behaviours.

In 2021, Versalis disseminated and promoted the Human Focus initiative through various communications to the Steering Team leaders.

## DIVERSITY, EQUAL OPPORTUNITIES AND INCLUSION

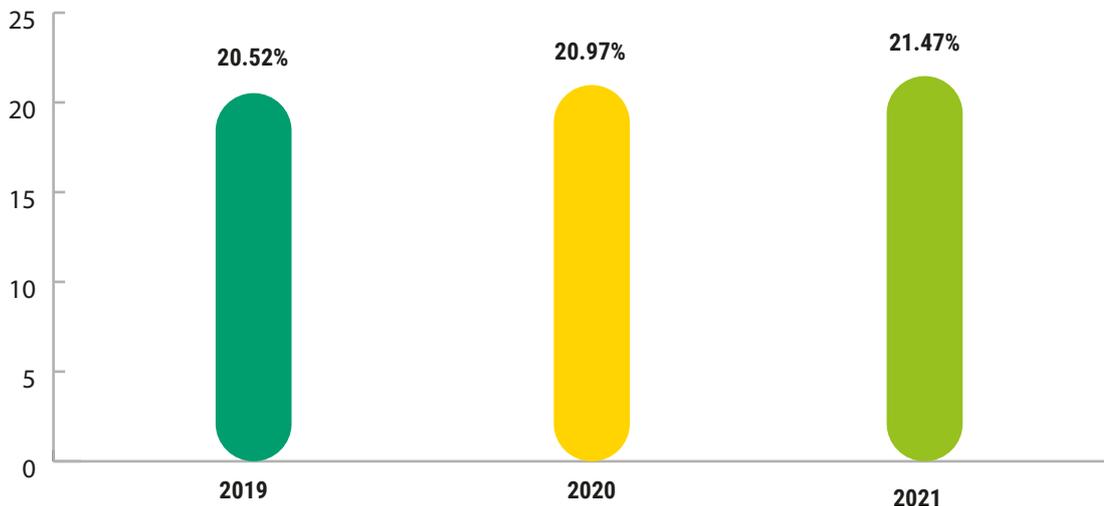
Diversity is a fundamental resource, which must be valued both within the company and in all relations with external stakeholders, as emphasised by Eni's mission and Code of Ethics.

Versalis's approach to diversity is based on the fundamental principles of non-discrimination, equal

opportunities and inclusion of all forms of diversity, as well as of integrating and balancing work with personal and family concerns. Versalis is committed to create a working environment in which different personal and cultural characteristics and orientations are considered a source of mutual enrichment and, above all, an indispensable element of business sustainability.

Versalis aims to establish working relations free from all forms of discrimination, requiring that similar values also be adopted by third parties with whom it collaborates: all Versalis personnel and third parties, in fact, have a duty to report any violations of the principles of the Code of Ethics, using the appropriate Reporting Channels, in line with the provisions of the reference regulatory instruments.

### WOMEN IN MANAGERIAL POSITIONS (senior managers and middle managers)



## INITIATIVES TO PROMOTE INCLUSION

### #ENIFORINCLUSION

Eni has developed a new annual communication stream called #EniForInclusion, to spread the culture of inclusion, and develop authentic, pervasive and widespread communication. Versalis contributed to the promotion of the initiative through a multi-tier awareness campaign to the Steering team members and through the involvement of the Human Resources function and the various sites.

**ORANGE THE WORLD:** Eni's adhesion to the world initiative against gender violence "Orange the world" (25th November - 10th December) through the support to the campaign by top executives and management, including the CEO and the Chairperson, the individual adhesion of people also from Versalis and the activation of a new e-learning course on harassment.

### TRAINING CAMPAIGN ON UNCONSCIOUS BIAS

Eni has launched a training campaign, translated into several languages, on Unconscious Bias, for all Group employees, and extended to Versalis and other subsidiaries, to address the issue both from a theoretical point of view and through a series of in-depth studies, exercises and self-observation suggestions, to reinforce individual awareness and the ability to correctly and effectively manage bias.

### FEMALE MENTORING, INTERGENERATIONAL, INTERNATIONAL

Processes to reinforce the value of intergenerational and international exchange and make internal relations more open to mutual comparison and inclusion, with a focus on women's careers. Since 2017, some 29 mentoring courses have been implemented in Versalis with around 15 mentors and the involvement of female colleagues and young resources.

## WELFARE AND WORK-LIFE BALANCE

In pursuing its business strategies, Versalis has always paid the **utmost attention to its employees**. In particular, emerging needs are analysed in detail, including through constant dialogue with the trade unions, with the aim of proposing **ever new initiatives capable of creating optimal conditions to promote the well-being of employees and their families, work-life balance and a positive corporate climate**. In particular, with regard to health and work-life balance, important initiatives have been implemented in recent years such as:

- the **enhancement** of health care, to complement and improve the health care services already provided by the sectoral funds;
- **voluntary prevention initiatives** such as the Early Diagnosis Plan, an annual program of check-ups carried out nationwide in collaboration with the Italian League for the Fight against Cancer, and the Preveni con Eni initia-

tive, carried out in partnership with facilities of excellence. The latter, thanks to which the internal medical protocol will be supplemented by specific cardiovascular tests and analyses, is currently available to employees at the Ravenna, Brindisi and Ferrara sites and will be extended to other sites;

- the **definition of Smart Working agreements** that allow employees with compatible duties to use up to 8 days per month for management offices, or more days in the case of parenthood and special situations, of remote working.

Furthermore, in the area of welfare, and in line with the national collective bargaining agreement, was introduced the **possibility of converting up to 50% of the value of the participation bonus**, an annual bonus paid to all employees based on the achievement of certain predefined company performances, into **welfare products and services**, effectively reducing their taxation for the benefit of

employees. The main initiatives developed at the contractual level also include supplementary pensions, low-interest loans and the services and activities offered by the Fasen fund (Fondo Attività Servizi Sociali per i Lavoratori delle Aziende del settore dell'Energia). The initiatives developed over the years for employees and their families, with the aim of increasing their well-being and purchasing power, now offer a wide range of services and conventions, such as the nursery and kindergarten service, school guidance tools, parenting paths, summer stays and summer camps, as well as support services for caregivers.

As further confirmation of Versalis's commitment in this regard, the Welfare Tutor service has also recently been set up, which will allow, on the one hand, workers to be oriented among the various welfare solutions made available to them and, on the other, to gather input for the evolution or improvement of the existing offer.

### FOCUS ON

## EMERGENCY SMART WORKING

During the height of the health emergency, 66% of Versalis' workforce, including production sites, benefited from emergency Smart Working

Upon the occurrence of the global health emergency due to COVID-19 in early 2020, Versalis promptly adopted Emergency Smart Working for all workers with compatible tasks to guarantee the protection of their health and the health of the community.

During 2020, Smart Working was alternated with in-presence work, in line with the evolution of the pandemic i.a.w the indications provided by the competent authorities, reaching 99% of San Donato Milanese personnel and 42% of the personnel of the production sites, corresponding to 66% of the Company's total workforce, during the months of the full health emergency.

The immediate adoption of Smart Working for more than half of the corporate population was made possible by the rapid provision of laptops with access to corporate servers. In addition, remote communication and collaboration tools such as Skype and Microsoft Teams, which are available on all PCs, were essential for remote working.

During 2021, emergency Smart Working was alternated with in-presence work, in line with the trend of contagions and the indications of the competent authorities, both at the San Donato Milanese site and at the production sites.

## PROFESSIONAL TRAINING AND GROWTH

The 2021 training area consolidated an intensive redesign of the entire courses catalogue offering remote training, prioritising health and safety topics. The commitment to the emerging themes of energy transition, circular economy and digitalisation remained prevalent in many of the training initiatives, both technical and corporate identity. In addition, e-learning training initiatives were implemented in the area of compliance with a focus on sustainability and human rights issues. The aim of this activity was to support the dissemination of guidelines, regulations and internal procedures that aim to comply not only with existing regulations but also with the internal rules the Group has set for itself in conducting its business.

Despite the difficulties caused by the continuing pandemic, there was a significant increase in 'on-the-job' training activities, carried out at operational sites mainly with personnel not involved in

smart working arrangements. The provision of training was ensured with the support of Eni Corporate University, through both internal resources and external suppliers, and the commitment of Versalis employees belonging to the 'Eni Faculty' as lecturers continued.

In addition, in 2021 Eni launched **MyChange**, a new digital environment that offers an **interactive and dynamic path of knowledge and learning**, and allows people to actively participate in the cultural change that the company is undergoing; as part of this, 221 Versalis employees have benefited from the content on the platform, relating to in-depth studies in different areas of activity, for a total of 397 hours.

**The profound transformation of business activities undertaken by Versalis implies on the one hand a strong involvement of the Company's personnel and partners, and on the other a major evolution of professional skills.** To support this need for enrichment or reorienta-

tion of skills, employee development systems are based on tools for mapping and updating competencies, assessing skills and analysing personal motivations, with the aim of enhancing talent.

In the course of 2021, taking into account the work carried out in previous years, some 108 role mappings in support of professional career paths were carried out. In addition, an interactive coaching course was first tested on a digital platform to support communication, management and self-confidence skills and competences: this initiative involved 10 Versalis resources, who measured themselves on issues not only of leadership but also of Diversity & Inclusion. This activity was complemented with the usual development of performance appraisal and feedback processes, necessary to guide resources towards skills upgrading that, in 2021, covered 100 per cent of the total target population (senior managers, middle managers and young graduates).

**Over 183,766 training hours provided to Versalis employees in 2021, of which more than 115,000 hours were on environmental, health, safety and quality issues**

## MAIN TRAINING COURSES

### COMMERCIAL TECHNICIAN PROFESSION

Technical training courses dedicated to specific professional families as well as master's degrees, commercial projects and Asset integrity training made available to all employees.

### SAFETY

Due to the limitations of participation in face-to-face courses, the delivery of the compulsory remote learning courses was essential.

### TRANSVERSAL PROFESSION

Transversal initiatives on compliance issues, but also specific professional courses required by businesses and training on the Digital Transformation Centre platform.

### BEHAVIOURAL/ COMMUNICATION/ CORPORATE IDENTITY

Open courses on heterogeneous topics such as Diversity & Inclusion and energy transition; Corporate Identity, Human Rights and sustainability but also cyber security.

### LANGUAGES AND IT

Initiatives to disseminate new computer and language skills.

### ENVIRONMENT, HEALTH AND QUALITY

Initiatives for the enhancement of core professionalism in the field of environmental regulations and health pathways.

In 2021 Versalis supported over 85,600 health surveillance services and more than 1,700 health care activities

## HEALTH

In order to promote and maintain people's health and well-being and to ensure adequate risk management in working environments, Versalis has long launched health promotion, occupational medicine and industrial hygiene projects that go beyond legally requirements, including, for example, both primary and secondary prevention services.

Prevention activities offered in 2021 include:

- i) programmes to promote healthy habits and lifestyles and campaigns for the prevention of oncological, cardiovascular and thyroid diseases, including through specific screening to assess different health risks;
- ii) awareness-raising campaigns among employees on the importance of flu vaccination and its implementation;
- iii) screening of the operational population coverage in terms of tetanus vaccination and possible vaccination coverage;
- iv) psychological counselling for workers with difficulties, discomfort, work-related stress disorders or individual or relational mental suffering.

## EMERGENCY HEALTH MANAGEMENT

The health crisis has become a priority for internal communication. The timely and massive adoption of Smart Working, an indispensable lever to protect the health of employees while guaranteeing the continuity of work activities, has produced an equally significant change in the relational model not only between employees and the company, but also between individual workers. The latter, in fact, found themselves isolated for long periods in the performance of their daily activities, far from the work context, which incorporates beneficial social implications as people's own motivation and productivity.

**Eni set up an efficient model of internal information and communication from the very first days of the emergency at the end of February 2020, in order to remain constantly close to its people:** through capillary, global and timely actions, it informed and kept employees constantly updated on the health situation, its progress and related prescriptions, both governmental and corporate.

**Alongside these activities, in-**

**volvement initiatives to re-establish a sense of closeness and internal cohesion with and among employees were equally important.**

Since February 2020, Versalis has established a Coronavirus Pandemic **Emergency Committee** to enforce and verify the rules of the regulatory protocol at all company sites. The main activities and initiatives carried out to manage health emergencies while ensuring business continuity and the health of its employees include:

- drafting an information sheet for workers summarising the behavioural and organizational rules to be kept during the internal emergency period and disseminating the information needed to manage the risk of contagion in the workplace;
- daily monitoring of virus positive cases registered at each site;
- at all Italian sites, a control procedure has been established by means of rapid antigenic tests in cases of readmission to work of employees who have come into contact with COVID-19 positive persons and in cases of particular critical situations identified by the relevant doctor and the employer.

### FOCUS ON

## INVIX® VERSALIS'S PLANT-BASED DISINFECTANT

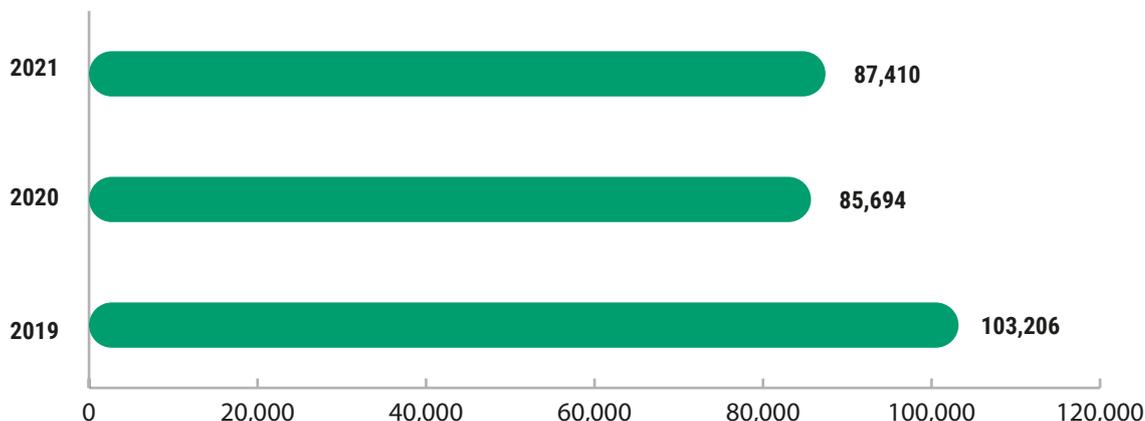
In 2020, in the midst of emergencies, Invix® was supplied to the commission structure for the distribution of the innovative disinfectant in some 18,000 Italian schools

In order to meet growing demand in the face of the national health situation, Versalis started up a new line for the production of hand disinfectant liquid, marketed under the Invix® brand, at its Crescentino (Vercelli) site in 2020.

Invix® is a Medical Surgical Device authorised by the Ministry of Health, developed on the formulation of the World Health Organization and has ethanol (alcohol) obtained from vegetable raw materials as its active ingredient. Bioethanol is produced at the Crescentino site, which was designed to process residual biomass, and whose set-up was adapted to temporarily use glucose syrup from maize as a raw material to cope with the health emergency.

The product has effective disinfectant power, thanks to alcohol and hydrogen peroxide, and emollient power, due to the presence of glycerine. The Invix® range includes two products for hand disinfection: the gel, with cellulose-based thickener, free from microplastics, and the liquid. The range was expanded by adding a specific liquid for surface disinfection to the existing products. For the coming years, Versalis intends to maintain production of Invix® as a retail product available to consumers.



**SANITARY SERVICES PROVIDED**

6,262

Number of registrations to health promotion initiatives in 2021

**VERSALIS'S HEALTH MANAGEMENT STRATEGY:**

Versalis directs its activities by setting up awareness-raising actions on the importance of prevention and the adoption of correct lifestyles, not only in Italy, but also in realities abroad in line with Eni's corporate body of regulations.

**HEALTH CARE**

To guarantee effective management and an adequate level of healthcare for Versalis employees by developing an appropriate healthcare model that is responsive to employees' needs.

**HEALTH SURVEILLANCE**

Definition, planning, management and execution of the health surveillance to be carried out on the worker, in order to guarantee:

- the protection of the health and safety of workers and their suitability to work in relation to the workplace, to occupational risk factors and to the way in which work is carried out;
- the interpretation and management of the results of this surveillance;
- the preparation and management of health documentation as well as sending it to the bodies required by the regulations in force.

All activities are managed by Versalis through a computerised occupational medicine and industrial hygiene system.

**INITIATIVES FOR EMPLOYEES DURING HEALTH EMERGENCY****EMPLOYEE ENGAGEMENT**

With the health emergency, Eni adopted the extraordinary Smart Working of 5 days a week for all workers with compatible tasks, and for health fragility situations prescribed by the relevant doctor. Thus, internal engagement through transparent and timely crisis communication played a decisive role in the management of the emergency.

**TRAINING SUPPORT**

During crisis management, 'Enicampus live' was created, a course accessible to all Eni personnel, with the aim of fostering greater awareness of individual behaviour, acquiring renewed responsibility for individual and team results, and interpreting current phenomena. Similarly, figures engaged in leadership on a daily basis were offered tools and reflections on how to manage emergencies and cope with uncertainty even in contexts ancillary to the purely work-related one.

# Safety



## VERSALIS' COMMITMENT

"We constantly strive to guarantee safety in the workplace, regardless of any contingencies, and to ensure the safety of our employees and contractors. To do this, we use organizational models, risk analysis and management, and the application of an accurate system of procedures and standards for the protection of employees, suppliers and processes, and for the integrity of facilities. We apply the principles of responsible management of health, safety and environmental protection to our products throughout the entire life cycle, ensuring continuous improvement, also by constantly informing the stakeholders involved."

| MARCO PETRACCHINI - CHAIRMAN |

## POLICIES AND OTHER REGULATORY INSTRUMENTS

Policies entitled "Our People", "The integrity in Our Operations", Eni's Statement on Respect for human rights; Eni's Code of Ethics.

## MANAGEMENT AND ORGANIZATION MODELS

Integrated Environment, Health and Safety Management System certified according to standard ISO 45001; Process safety management system; Emergency preparedness and response with plans that puts the protection of people and the environment first; Product Safety Management System; Methodology for the analysis and management of the Human Factor in accident prevention.



## SAFETY IN THE WORKPLACE

In all Versalis operations, commitment to safety is a priority.

The Company adopts advanced occupational and process safety management models through a detailed body of documentation, which is constantly updated and widely adopted in the Group's industrial and commercial units. The QHSE function periodically carries out benchmarking analyses, aimed at researching international best practices for the protection of safety, the environment and public safety, and oversees the adoption of knowledge management tools and information systems to ensure a homogeneous approach to the critical aspects of HSE activities.

Versalis considers safety culture to be a fundamental part of its management approach, activating a series of initiatives aimed at strengthening the knowledge and dissemination of good practices to be followed and to become active and proactive players.

With regard to Occupational Safety, Versalis confirmed its commitment to zero accidents.

In 2021, the Total Recordable Injury Rate (TRIR) of the workforce (employees and contractors) decreased by 8% compared to 2020, with a decrease in the index for employees only and an almost constant value for the index for contractors. The number of recordable accidents shows a constant trend from the previous year, with 11 accidents in 2021, compared to 12 in 2020. The events are mainly attributable to incorrect behaviour, for which a parameter called 'GSP - Global Site Performance' was introduced in 2021 to reinforce field surveillance of activities (including through cross-checks between different departments), face-to-face meetings between Versalis employers and companies, field audits of Employers and Safety Delegates, field audits between Safety Delegates and Supervisors, and other initiatives dedicated to spreading

a safety culture. Furthermore, in 2022, Versalis, with the support of Eni, plans to launch an online training course dedicated to operational safety management.

In terms of **Process Safety**, Versalis also confirms its commitment to reducing process safety events. In 2021, there was an improvement in performance evidenced by a decrease in Tier 1 and Tier 2 events. Levels ("tier") 1 and 2 indicate the accidental event's severity (from the most serious to the least serious) in terms of quantities of dangerous substances released and damage caused to people or assets. In addition, **a specific document was introduced in 2021**, adopted as part of the updating of safety reports (Seveso) at all Italian Versalis sites, for the identification of critical items, measurement and control of accident scenarios from NATECH events<sup>11</sup> including the analysis of possible domino effects, the related Emergency Response and mitigation measures.

## FOCUS ON

### THE HUMAN FACTOR IN HSE

On February 23rd, 2021 Eni organised the web seminar "The Human Factor in HSE", which was attended by about 600 people, from both central and operational functions, from all over the world to listen to the speeches of both external and internal guests, specialists in the field of behavioural analysis and human reliability.

As well as exploring the Human Factor in greater depth, the seminar was held to share Eni's complete and unequivocal vision of safety, which transforms humans from the people that generate errors and suffer the consequences to the active barrier that prevents them. Contributing to the day were Erik Hollnagel, from the Swedish University of Jönköping, an international expert in the field of organizational resilience engineering, as well as specialists in the field of behavioural analysis and human reliability and Eni colleagues.

The seminar presented Eni's THEME project, an innovative method of investigating safety within the organizational context, which integrates theoretical approaches based on human error with others centred on the analysis of contextual factors that contribute to a safe workplace. In 2021, the Versalis Ravenna site was involved in the field trial of the THEME methodology, and in 2022 a performance audit on the critical activity of hydrodynamic washing will be carried out.

<sup>11</sup> Technological accidents, such as fires, explosions and toxic releases that may occur within industrial complexes and along distribution networks as a result of natural disasters.

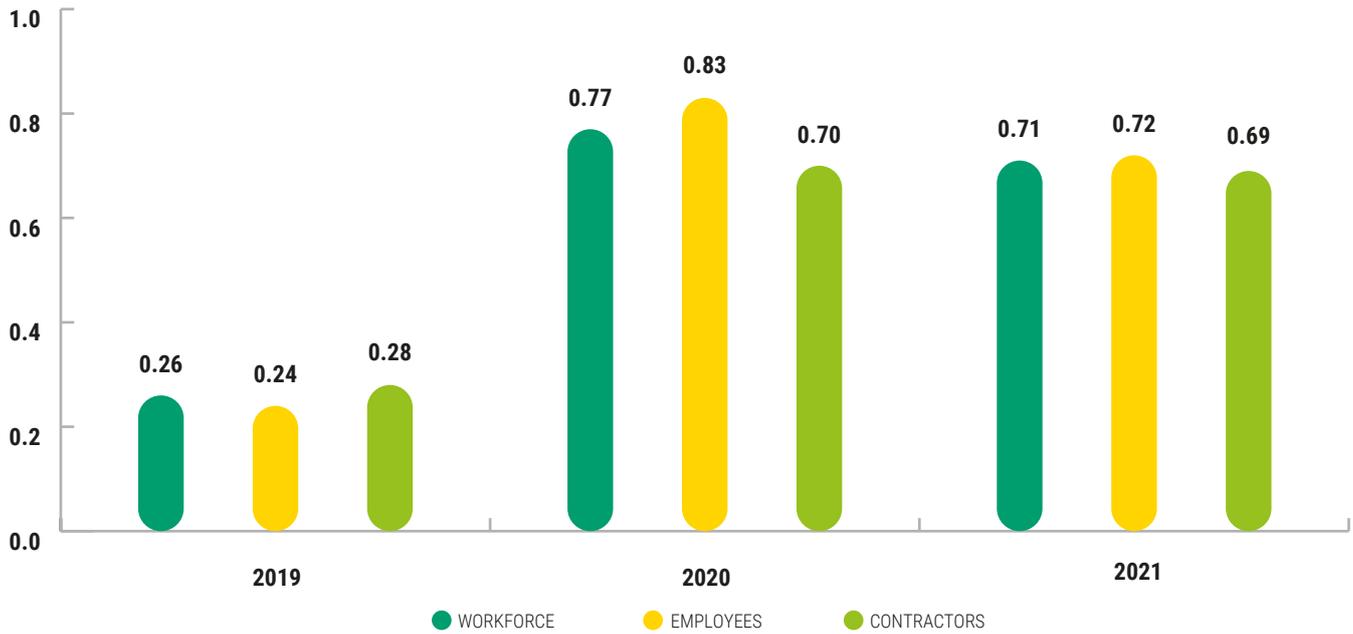
14 Versalis plants involved in the Process Safety Fundamentals project

In 2019, Eni defined Process Safety Fundamentals, i.e. 10 basic operating rules whose ultimate aim is to prevent negative

events, through the involvement of all personnel and contractors. The campaign, disseminated through dedicated workshops

and supported by in-depth materials, started in 2020 and continued in 2021, involving a total of 14 Versalis plants.

**TRIR (Total Recordable Injury Rate)** (total recordable injuries/worked hours) x 1,000,000



10 PROCESS SAFETY FUNDAMENTALS

- VERIFY PROCESS LINE-UP CONDITION BEFORE START-UP
- VERIFY CONNECTIONS TIGHTNESS BEFORE RETURNING TO SERVICE
- REPORT & TAKE INTERIM MITIGATION MEASURES FOR IMPAIRED SECES
- PROVIDE SAFE ISOLATION BEFORE STARTING A MAINTENANCE JOB
- OPERATE OVERRIDE AND BYPASS OF SAFEGUARDS ONLY WITH AUTHORISATION
- STAY WITHIN SAFE OPERATING LIMITS
- MONITOR OPEN DRAINING OPERATIONS
- CONTROL LOADING & UNLOADING OPERATIONS OF HAZARDOUS FLUIDS
- EMPTY AND DEPRESSURIZE PROCESS EQUIPMENT BEFORE OPENING
- REPORT & MANAGE ANY LOSS OF CONTAINMENT ON SITE

## PRODUCT STEWARDSHIP

For Versalis, Product Stewardship means being careful and responsible towards its products, considering every aspect of them that may affect human health, the safety of those who use them (workers and consumers) and the environment. This focus goes far beyond mere regulatory compliance, extending across the entire product life cycle. Through effective communication along the entire supply chain and thorough risk

assessment, the safe use of company products is ensured for every stakeholder, every known application and in every known environmental compartment of destiny, always with a view to continuous improvement. Versalis has equipped itself with an IT Management System for all chemical products (chemicals), present in its Italian and foreign production sites, as well as for chemicals, marketed in all its European and worldwide locations. This management system

finds its essential tool in the census of chemicals on a dedicated IT platform, Athos, which allows transparent sharing of information between all stakeholders (workers, customers, Authorities). For each chemical agent or product, hazardousness is highlighted and a description of safe use is provided throughout the procurement chain.

In Versalis, Product Stewardship is declined in: **Product Safety** and **Sustainability**.

Versalis' Product Stewardship program, made even more relevant by its focus on Just Transition, ensures continuous improvement in health, safety, environment and product sustainability

### PRODUCT SAFETY

The principles and objectives of the European Regulations (e.g. REACH, CLP, PIC, BPR)\* and the relevant national legislation underpin the development of a **responsible, competitive and sustainable chemical industry**. Versalis ensures that its products comply with the regulations in force in the countries around the world where they are intended, also taking into account the applications for which they have been designed.

The goal is not only compliance with the regulations, but the constant striving to **improve their implementation efficiently and effectively** throughout the supply chain of its products.

### PRODUCT SUSTAINABILITY

Versalis is constantly striving to improve the environmental sustainability profile of its product portfolio, extending the analysis of environmental impacts to research and development as well as production phases. To do this, it uses the **Life Cycle Assessment (LCA)** methodology, a structured and internationally standardised method to **quantify the potential environmental and human health impacts** associated with a good or service, starting with resource consumption and emissions. To date, more than **72% of Versalis products placed on the market are covered by environmental impact assessments according to the LCA method**.

Furthermore, as an integral part of Product Sustainability, Versalis has chosen to actively participate in the development of LCAs on its product portfolio in cooperation with the industry associations (Plastics Europe, IISRP and Cefic).

## VERSALIS' COMMITMENT TO PROMOTING RESPONSIBLE PRODUCT DEVELOPMENT

### PRODUCT STEWARDSHIP PROGRAM

Accountability, transparency and involvement are the keywords of the program, and Versalis is there to make it happen:

- It operates by adopting the best **international best practices**, and implementing the best available technological and scientific innovations;
- It designs, manufactures and markets **increasingly sustainable** products, with the support of tools capable of assessing sustainability at different stages of the product life cycle;
- It spreads the value of **Product Stewardship principles and culture** in the company;
- carry out appropriate **supplier qualification activities** and activate **"stakeholder engagement"** processes for appropriately steering research, development and design of new products.

### FOCUS ON

## CREATION OF AN INTERNAL TASK FORCE FOR PRODUCT SAFETY

To guarantee the appropriate management of chemicals, **Versalis has an organizational structure to ensure the engagement of all stakeholders, from top management to customers/end users**. In particular, each Versalis production site has set up its own interdisciplinary working group for the correct census of the chemicals present and to provide support for the collection of information on their uses. In addition, a centralised task force, co-ordinated by the Product Safety unit and consisting of representatives of all corporate functions involved in product issues (Production, R&D, Sales and Marketing, Supply Chain, QHSE, etc.), ensures, for the relevant parts, further information for proper regulatory management of chemicals. The Product Safety unit is then responsible for reporting any critical issues and/or strategic decision-making needs to top management.

On the other side, the communication of information to and from external actors (customers and suppliers) is ensured directly by the Product Safety unit through the use of dedicated communication channels. Added to this is the synergy between the different company levels, guaranteeing the correct and thorough collection of information on the product life cycle.

\* REACH Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

CLP Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures.

PIC Regulation (EU) No. 649/2012 on Prior Informed Consent regulating the import and export of certain hazardous chemicals and imposing obligations on companies wishing to export such substances to non-EU countries.

BPR Regulation (EU) No. 528/2012 concerning the making available on the market and use of biocidal products.

Asset integrity ensures the safeguarding of people, the environment and operational continuity

## ASSET INTEGRITY

Asset integrity is the ability of the asset to perform its required functions effectively and efficiently to achieve the business targets, whilst protecting people's safety, the environment and the company's reputation for the entire lifecycle.

The design and management of Versalis' assets are carried out in accordance with a structured Asset Integrity Management System. In particular, the Asset Integrity process is developed from the earliest design stages, through design integrity and technical integrity, taking into account the operational needs of the asset at both the physical and documentary level. The operational phase (operating integrity) is conducted by following procedures and instructions collected in the continuously updated operating manual, while any plant modifications are carried out in accordance with a strict management of change policy. The optimal maintenance of this process is ensured by formalised maintenance and inspection policies applied through the use of IT tools and the monitoring of appropriate KPIs. Finally, the assets are subject to improvements

in order to keep them up-to-date with the best available technologies, according to the sustainability needs of the business.

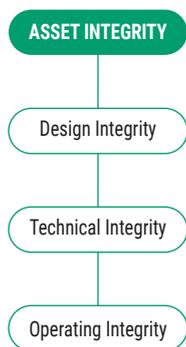
## IT SECURITY OF INDUSTRIAL ASSETS

Versalis' industrial processes are managed through electronic and computerised systems that enable the supervision, control and security of assets (ICS - Industrial Control System). While this provides multiple benefits, at the same time, exposure to the threats and vulnerabilities typical of the cyber world increase the level of criticality of these assets. Malfunctions could affect safety, the environment and corporate reputation, with potential economic losses.

Within this scenario, there is a growing need for increased attention in the management process of industrial control systems, the adoption of specific measures to detect, protect and manage possible cyber attacks, as well as training and awareness-raising activities for human resources interfacing with these assets. To address this, starting in 2020, Versalis has defined and initiated an enhancement path on the

management of ICS with a specific focus on cyber security aspects. In particular, a cyber security risk assessment program was defined, involving all production sites in Italy and abroad, starting from the pilot projects carried out at the Priolo and Mantua sites. The objective of such assessments is the definition of a remedial plan that, based on the relevance of the business and the exposure factor, allows the risk to be brought back into an acceptable area, reducing the perimeter of possible cyber attacks. In 2021, the risk assessment was extended to the Ferrara, Porto Torres, Dunkirk and Brindisi sites.

In 2021, Versalis equipped itself with an **internal regulatory instrument** that provides the necessary references and indications for identifying and managing risks, implementing and managing prevention and mitigation measures, and defining roles and responsibilities in the area of cyber security. The implementation of **cyber security remedial plans** for the Priolo pilot site was also launched, starting with the installation of anti-intrusion monitoring probes manned by Eni's security operation centre.



## DOWNTIME ACTIONS FOR MAINTENANCE AND NEW INVESTMENTS

During 2021, Versalis implemented **plant shutdowns preparatory to planned maintenance activities and new investments** planned at the Mantua and Brindisi plants. Shutdown activities play a key role in maintaining the **operational integrity of assets**. Every system, as a result of its normal operation, undergoes a gradual degradation that can affect performance. In order to **restore perfect operational efficiency**, it is therefore necessary to periodically stop the equipment to carry out maintenance work, including **internal and external inspections of the equipment, cleaning, replacement of damaged or worn parts**, and all activities necessary to ensure perfect operation.

### MANTUA

The maintenance activities carried out at the Mantua site concerned the styrenic and intermediate plants and a major new investment for the expansion of styrenic polymer production, for an **additional capacity of 30,000 t/year**, towards differentiated and high added-value grades, destined for key sectors such as automotive, furniture and household appliances. The activities involved an intervention time of 47 days and involved up to 650 people with a total invested amount of approximately EUR 40 million.

### BRINDISI

Maintenance activities carried out at the Brindisi site concerned the cracking, butadiene, polyethylene and seawater and electrical systems. The activities involved intervention times of up to 90 days with a total invested amount of approximately EUR 40 million. At the same time as the maintenance activities, investments were made to **improve the technology of the cracking furnaces**, to increase the reliability of the electrical network and the electrical drives of the process compressors, and the new ground torch was built with investments totalling around EUR 60 million.

The purpose of the flare is to abate, by combustion, hydrocarbon releases that may originate from the plant under particular operating conditions such as shutdown or restart. The closed type torch will lead to optimised combustion, absence of smoke, lower noise and reduced visual impact. The activities involved a total of up to 1,700 external and 200 internal personnel per day.

## FOCUS ON

## OPERATIONAL INTEGRITY WINDOWS PROJECT

The operational window development project at Versalis is based on the **direct correlation between the variability of chemical/physical parameters and the useful life of the asset**, allowing the operational window to be identified for the most critical assets in order to minimise **their deterioration** and **update their remaining life in real time**.

This project was launched in 2019 as part of the Digital Lighthouse initiative in Brindisi, which included the development and subsequent implementation of a series of operational windows related to the cracking plant at the site. In 2020, the project was extended to all Italian sites, with the exception of the Porto Marghera site. For each Italian site, a pilot plant was identified on which activities were carried out to update RBI (Risk-Based Inspection) analyses, identify critical plant equipment and parameters with the greatest influence on damage mechanisms, leading to the definition of 53 operational integrity windows.

In 2021, the Integrating Operating Windows (IOWs) defined in the previously developed studies for each pilot plant were developed within the Versalis collaborative platform, leading to a total of 69 IOWs being monitored. In addition, **an e-mail notification system** was introduced, which is triggered when set thresholds are exceeded, and an event log with the possibility of storing information and notes.

The design makes it possible to identify the mix of operating parameters and the corresponding safe values - the so-called operating window - that will minimise deterioration of assets

## ENI'S APPROACH TO PLANT CHANGES MANAGEMENT

With the aim of guaranteeing the highest standards of Asset Integrity and safety of its plants, Versalis has **regulated the management of modifications** by means of a **specific operating instruction** that makes it possible to identify, by means of checklists, all the critical aspects of a project, in terms of quality, health, safety and environmental performance, starting from the early stages of development up to the stages of *commissioning* immediately preceding the implementation of the change.

In particular, the objectives of this IT tool are to:

- enable **traceability of all changes** to assets/procedures/organization affecting a system, facility or item of equipment;
- identify **roles and responsibilities** for the correct execution of activities;
- ensure the **proper implementation of the change**, implementing all necessary actions to guarantee that no unintended risks emerge as a result, that appropriate risk mitigation is implemented and that operational and HSE aspects are not compromised.

The management of plant data and documentation (Life Cycle Information) is regulated in a special operating instruction that defines the information to be kept on the asset and the IT tools to be used



# Circular economy



## VERSALIS' COMMITMENT

"With a view to creating value for all stakeholders, we are developing a sustainable and circular business model in order to contribute to the achievement of the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda, effectively optimise the use of resources, and address global climate challenges in a concrete way. Our actions leverage innovation and the opportunities that partnerships with other players can offer: an approach that considers the entire life cycle of products, from feedstock diversification - also through the use of renewable sources - to the development of innovative recycling technologies for plastics and rubbers and the implementation of circular design schemes for our industrial packaging."

| ALESSANDRA COLOMBO - HEAD OF CIRCULAR ECONOMY AND SUSTAINABILITY |

## POLICIES AND OTHER REGULATORY INSTRUMENTS

Sustainability Policy; Versalis Circular Universe; Social Responsibility Policy; Eni Code of Ethics.

## MANAGEMENT AND ORGANIZATION MODELS

Management practices related to PSV (Plastics Second Life) and Recyclclass product certifications; Management practices related to ISCC PLUS and ISCC EU Certifications of production sites.



## CIRCULAR ECONOMY

The path of transformation towards a circular economy undertaken by Versalis is closely related to the external, regulatory, institutional and associative context in which these issues are discussed. Versalis recognises the absolute need to **define a common strategy**. The circular economy can **support the achievement of environmental goals** while ensuring the **sustainable and equitable availability of raw materials, reindustrialisation** and the creation of new employment opportunities, strengthening the competitiveness of industries and decoupling economic welfare from resource availability. Versalis is strongly committed to the creation of sus-

tainable processes and products using new alternative sources and developing solutions that can help solve the plastic and rubber waste problem. In particular, the Company is investing in the valorisation of available recycling technologies and in the development of emerging ones, boosting the creation of a market for secondary raw materials and bringing innovative products to the market. Furthermore, on the road to sustainability and circularity, **Versalis adopts** two important tools:

- **Life Cycle Perspective (LCP)** as a guiding element in the approach to product and process development; this approach considers all phases of a product's life cycle, from the acquisition of

raw materials to treatment and disposal at the end of life. In addition to technical and economic evaluations, LCP makes it possible to demonstrate the actual sustainability of the developed innovative solutions and their generated contribution along the entire value chain;

- **the involvement of employees**, making each Versalis person an active part of the journey towards the development of circular and sustainable behaviour and models.

Versalis' main lines of development in the circular economy include:

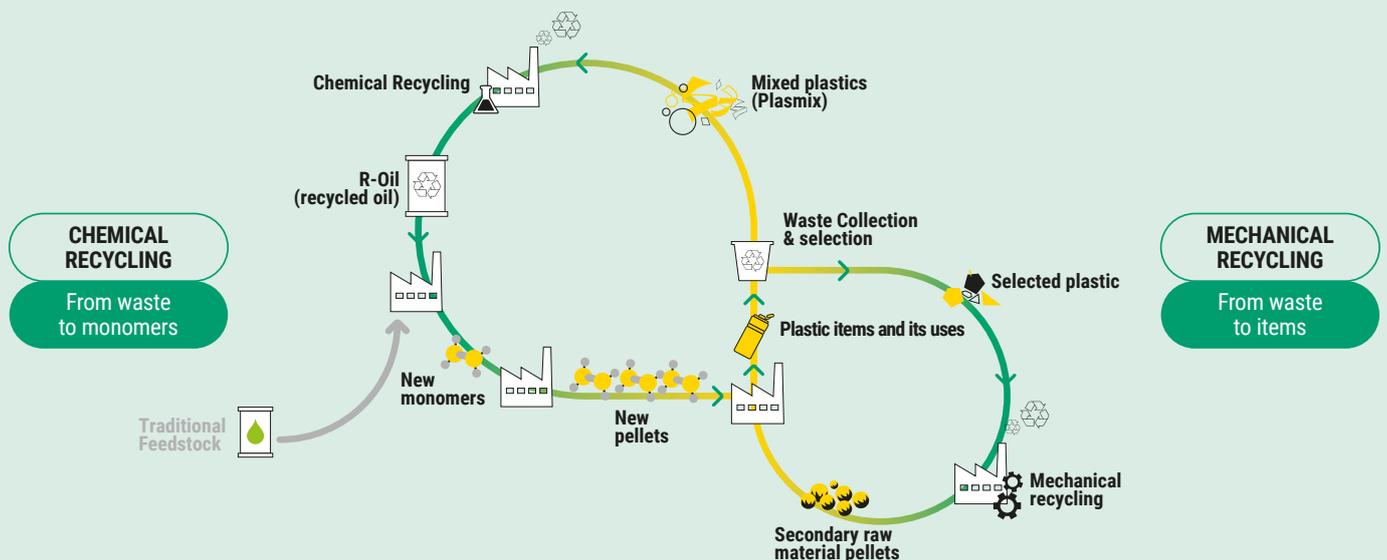
- polymer and rubber recycling;
- circular packaging;
- feedstock diversification.

### FOCUS ON

## CHEMICAL RECYCLING AND MECHANICAL RECYCLING: TWO COMPLEMENTARY PATHS OF VERSALIS' CIRCULAR STRATEGY

Recycling is the collection and transformation process through which waste is given a new lease of life in the form of a second raw material suitable for making new products. After the use phase, plastic products are sent through separate collection to a sorting process, and this can be recycled through different, complementary technologies. **Mechanical recycling** refers to the recovery of plastic waste that, after being separated by polymer type, undergoes mechanical shredding treatment; this process does not alter the nature of the polymer, which can then be reused directly - in the form of granules - to produce new products, usually mixed with virgin ones. It is the most widely used technology in Italy, Europe and the world, partly due to the presence of well-established collection and pre-treatment infrastructures. In this area, Versalis is committed in improving the qualitative and mechanical characteristics of the product obtained in order to maximise the amount of secondary raw material used.

The term **chemical recycling** refers to various emerging recovery technologies in which plastic waste is decomposed through various thermal, chemical and/or catalytic processes and returned to its starting original composition, i.e. new raw materials (chemicals and/or fuels). The resulting circular chemicals can be used for the production of substances and polymers with properties and qualities identical to those of virgin raw materials. Chemical recycling technologies can be used to treat mixed plastic waste flows for which mechanical recycling may be impossible or inefficient, as well as waste from mechanical treatment.



## RECYCLING POLYMERS AND RUBBER

Versalis is committed to the development of mechanical, physical and chemical recycling technologies for plastics and rubber through internal research and in partnership with associations, consortia and supply chain actors. Mechanical recycling is already developed on an industrial scale and has a beneficial economic and energy impact; however, it still has some technical and application limitations. In order to increase the recycling of polymeric waste and achieve full circularity of plastic products, we believe that this recycling mode should be further developed and progressively integrated in a complementary way with emerging and innovative physical

and chemical recycling technologies, capable of processing even different and more complex plastic flows.

In 2020-2021, the company's main projects in the area of polymer recycling were:

Hoop<sup>®</sup>, the circle, widely used as a symbol of circularity, is the name of the project undertaken by Versalis to develop a **new technology for the chemical recycling of plastic waste**, initiated thanks to a joint development agreement with the Italian engineering company Servizi di Ricerche e Sviluppo (S.R.S.), owner of a pyrolysis technology<sup>12</sup>. This technology has been further developed in our laboratories to transform mixed plastic waste, which to date can-

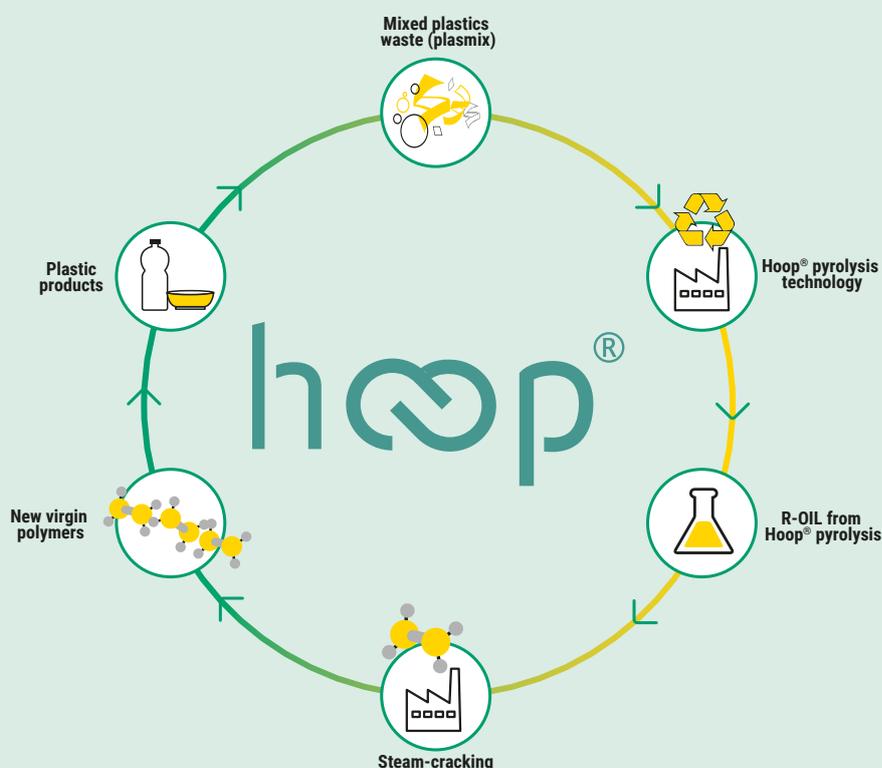
not be mechanically recycled, into raw material that can be used to make new chemicals, plastics and rubbers with the same characteristics as virgin products and that can be used in high-value applications such as food contact and pharma. Versalis has committed to building **an initial 6,000 tonne/year demonstration plant in Mantua**, with the objective of a subsequent and progressive scale-up starting from national production sites. In order to measure the environmental footprint of this technology, Versalis has launched a Life Cycle Assessment (LCA) study to assess the sustainability of different process designs; these findings will help support decisions on the choice of the best technological solution to industrialise.

### FOCUS ON

## HOOP TECHNOLOGY<sup>®</sup>

HOOP<sup>®</sup> technology offers the following advantages:

- **flexibility** in terms of input plastic materials;
- **recovery rate of more than 85%**;
- **high R-OIL quality** that allows use as a substitute for conventional naphtha with minimal reduction on steam cracking performance;
- **80% reduction** in CO<sub>2</sub> emissions compared to waste-to-energy;
- **possible direct integration with renewable energy sources** for a further reduction of the carbon footprint.



12 Thermochemical decomposition process of polymers.

Versalis Revive® is the first range of different polymer-based products containing **recycled plastics**, developed in Versalis research laboratories and with partnerships along the value chain. Recently, the Versalis Revive® range of products was expanded to include elastomeric materials, market in which Versalis is a leader for *know-how* technology and application. With Versalis Revive®, the company is taking up one of the most difficult and virtuous technological challenges of the circular economy: giving new life to plastic and rubber waste

by transforming it into innovative products that can be used in multiple quality applications. In 2021 were carried out the **planned renewal audits of PSV** (Plastics Second Life) certification, a product certification were carried out; for materials and products containing **secondary raw materials obtained from the valorisation of plastic**: the range of certified products was further extended to include new materials. In addition, during the year, **RecyClass certification of Versalis Revive® EPS products** was obtained for the first time.

The Versalis Revive® range in continuous expansion, includes - at the moment - polystyrene, compact and expandable, polyethylene and elastomer grades. The recycled plastic contained in the products comes from household, commercial and industrial recycling loop and the recycled content within the products is variable. Furthermore, the products manufactured can be used in many different applications and sectors, in compliance with the regulations required by the specific sectors. The following infographic summarises the product lines in the Versalis Revive® range:

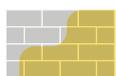


### VERSALIS REVIVE® EPS

Expandable polystyrene grades containing up to **35%** of recycled plastic from post-consumer packaging (e.g. yoghurt pots)

#### APPLICATIONS

Insulating panels



Protective packaging  
Furniture/electrical appliances



### VERSALIS REVIVE® PE

Polyethylene-based compounds containing up to **75%** of post-consumer plastics, mainly from recycled packaging

#### APPLICATIONS

Agriculture



Film



Packaging

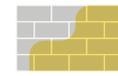


### VERSALIS REVIVE® PS

Polystyrene-based compounds containing up to **75%** of recycled polystyrene from municipal waste collection (e.g. yoghurt pots)

#### APPLICATIONS

Thermal insulation



Food/non-food packaging



Household articles



### VERSALIS REVIVE® ESBR

Elastomer-based materials (ESBR) with a **variable content of micronised dust** from end-of-life tyres (ELTs)

#### MAIN ADVANTAGES

- Homogeneity of pre-dispersed powder in virgin rubber
- Lower dust emissions in the working environment
- Fewer ingredients during compounding
- Handling and storage of products in bales instead of powder

### VERSALIS REVIVE® DVC

Compounds made of **100% recycled material** obtained by **devulcanising end-of-life tyres**

#### MAIN ADVANTAGES

- Material ready to be mixed and devulcanised into new compounds
- Differentiated grades for different applications due to accurate control of the selection chain and devulcanisation process
- Very low metal residue content

During the past year, the LCA evaluation of the Revive® Gamma was started

## LIFE CYCLE ASSESSMENT (LCA) OF STYRENIC POLYMERS

Life Cycle Assessment (LCA) studies on virgin styrenic polymers and their versions with mechanically recycled content from the Versalis Revive® range were started in 2021, in accordance with ISO 14040 and ISO 14044. The results of these studies will be crucial in identifying **potential levers** to further reduce the environmental footprint of all products, both virgin and Versalis Revive®.

### FOCUS ON

## THE FIRST POLYSTYRENE FOAM TRAY WITH POST-CONSUMER RECYCLING

The EcoDesign XPS tray project started in 2020 with the aim of designing an expanded tray that could accommodate **recycled polystyrene and**, at the same time, develop a **recycled polystyrene to be used, for the first time, in food applications**. The project involved actors of the styrenics value chain in Italy: Corepla (collection and sorting of household waste into PS), Foreverplast (recycler), Versalis, Profood/Unionplast (Italian association of packaging manufacturers), Fraunhofer Institute. The result of this collaboration was a tray consisting of an inner layer containing Versalis Revive® PS Air F - Series Forever (product with 75% recycled content) and two outer layers made of virgin polystyrene. This structure, known as the A-B-A functional barrier, ensures food contact compliance. Thanks to the recycled content in Versalis Revive® PS Air F, the tray thus composed can contain up to 50% recycled polystyrene obtained from domestic waste collection. Marketing of the product started in the second quarter of 2021 in the French market and is experiencing rapid take-up in Italy, France and Belgium.

### INTERVIEW



Interview with  
**Antonio Protopapa**  
Director of Operations  
Management at  
COREPLA.  
He is responsible for the  
Collection, Sorting and  
Supply Chain activities  
of the Consortium for  
the Collection, Recycling  
and Recovery of Plastic  
Packaging.

### A PARTNERSHIP TO GIVE VALUE TO EVERYDAY GESTURES

#### What does the RiVending project consist of?

This is an Italian initiative promoted by Corepla, Confida and Unionplast which, through the optimisation of collection and recycling flows, allows the **recovery of polystyrene cups and coffee stirrers**<sup>13</sup> present in vending machines and potential mechanical recycling of them to **create new valuable plastic products**. In practice, a special container is placed next to the vending machine where glasses and pallets can be thrown after use. These, once collected, are collected by the same company that handles the waste together with the rest of the separate waste collection and given directly to Corepla, which sends them for recycling.

#### What is the advantage of a dedicated collection system?

Both vending cups and stirrers are made of a single type of plastic (com-

pact polystyrene) and are easily recyclable: the residues of coffee, milk, tea or similar beverages are in fact watery liquids that can be easily eliminated during mechanical recycling, which will turn them back into plastic flakes or granules. By simplifying the recycling process of this material and making it efficient, it is possible to recover a plastic of very high quality and value, avoiding the costly and time-consuming steps of separation from other plastics and heavy industrial washing.

#### How was the project rolled out at the Eni and Versalis sites?

Eni's adhesion to the RiVending project took place in synergy with the development of Versalis Revive® EPS : in particular, the secondary raw material obtained from the disposable products collected from the refreshment areas of Eni's buildings in San Donato Milanese contributes to feeding the Versalis plant in Mantua for the production of expandable polystyrene for insulating sheets and protective packaging of household appliances and furniture.

The RiVending project at Eni represents an example of a **virtuous mechanical recycling circuit** and is, moreover, **potentially scalable and exportable for other types of plastic products** destined for short-life applications, configuring itself as a method destined to provide interesting volumes of quality secondary raw material.

#### What is the contribution of the companies participating in the RiVending project?

The participation of companies in the RiVending initiative is a virtuous example of selective collection where different actors successfully collaborate along the supply chain to develop a shared value project. In particular, Eni's membership was handled as an initiative to involve all personnel and visitors. This element has a particular value because through its people and their families, Eni encourages virtuous behaviour in everyday life and raises awareness of the potential and importance of recycling, while providing a concrete and tangible point of view.

<sup>13</sup> The use of plastic pallets has been banned by the European Single Use Plastics Directive and their collection through RiVending will be carried out until stocks already placed on the market are exhausted within the regulatory timeframe.



## CIRCULAR PACKAGES

Packaging is the main sector in which plastic is used<sup>14</sup> (40.5% of the total demand for plastics in Europe). However, packaging, when designed for single use, can quickly generate waste which, if not properly managed and treated, has the risk of being dispersed into the environment. The environmental and social implications of plastic waste are particularly relevant for Versalis, which has joined several associations, including the **Circular Plastics Alliance (CPA)**, by **signing voluntary pledge in 2020, including on industrial packaging**. With this in mind, Versalis is committed to the **development of circular design schemes for its industrial packaging and the design of high-performance and sustainable materials**. In particular, Versalis launched the 'Bag to Bag' and 'Liner to Liner' projects, creating virtuous circuits aimed at the use, recovery and recycling of polyethylene packaging and its reintroduction into the system for the same purposes. In the 'Bag to Bag', the bags used for packaging and shipping Versalis' polyethylene products - including grades for food applications - are made from 50% recycled material and are themselves fully recyclable,

thanks in part to a design specifically developed to reduce the use of ink.

In 'Liner to Liner' - developed and mainly applicable at the user site in Brindisi - all the inner liners of the containers used for transporting bulk polyethylene are sent for recycling and transformed into new liners, containing at least 50 per cent recycled plastic, which can then be reused at the same industrial site.

## FEEDSTOCK DIVERSIFICATION

Versalis is constantly searching for **new opportunities to diversify the feedstock for products and/or packaging by exploring the use of raw materials from renewable sources and secondary raw materials obtained from the recycling of plastic and non-plastic waste**.

In this context, Versalis in 2020 developed Balance®: the new family of products made from alternative raw materials used alongside traditional ones. The range is divided into different sub-families depending on the origin of the alternative feedstock:

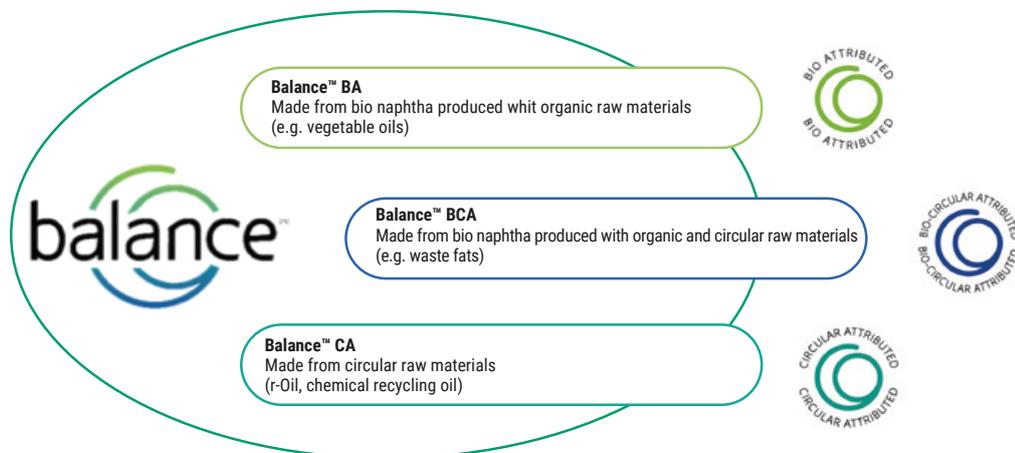
- **Balance® BA** - bio-attributed products made from bionaphta obtained from vegetable oils;
- **Balance® BCA** - bio-circular products attributed made from

bio circular naphtha obtained from by-products or waste of biological origin (e.g. used cooking oil);

- **Balance® CA** - the circular-attributed products made from pyrolysis oils ('recycled oils') obtained from the chemical recycling of mechanically non-recyclable plastic waste.

The bionaphta and bio-circular-naphta currently used are supplied by Eni's biorefineries in Venice Porto Marghera and Gela. ISCC PLUS certification covers products in the Balance® range of products and is an important guarantee as it makes the sustainability characteristics of finished products of alternative raw materials, verifiable even when during production activities, it is not possible a physical segregation between sustainable raw materials and traditional ones. Essentially, sustainability characteristics are attributed to specific quantities of finished products, considering both the quantities of sustainable raw materials available and the efficiency of the transformation processes used.

For more information: see [Circular Economy at the Service of decarbonization p. 32](#)



## ALLIANCES AND PARTNERSHIPS FOR CIRCULAR ECONOMY AND PLASTIC RECYCLING

Versalis actively participates in the main associations and working groups for the Circular Economy at both national and European level, including Styrenics Circular Solution (SCS), Alliance to End Plastic Waste (AEPW) Polyolefin Circular Economy Platform (PCEP), PolystyreneLoop and Circular Plastic Alliance (CPA).

### CIRCULAR PLASTIC ALLIANCE

By joining the CPA, Versalis submitted its voluntary pledges in support of the company's circular economy strategy:

- in circular packaging, for the shipment of their products: 50% of the polyethylene packaging will contain up to 50% of recycled material and will be further recyclable and/or reusable;

The Alliance, promoted by the European Commission, aims to stimulate the recycling of plastics in Europe and at the same time develop the market for secondary raw materials. Versalis has joined the **Circular Plastics Alliance (CPA)** to actively contribute to the ambitious European target of using 10 million tonnes of recycled plastics in new products by 2025.

- as part of recycling and feedstock diversification, Versalis will produce up to 100,000 tonnes of polyolefin-based compounds containing up to 70% post-consumer polyolefins and up to 20,000 tonnes of styrenic polymers containing up to 50% recycled product;
- to strengthen the recovery and recycling of all types of plastics that cannot be mechanically processed, Versalis is committed in the **development of a new chemical recycling technology to transform mixed plastic waste into raw material** with which to produce new virgin polymers;
- assessments conducted by certified life cycle analyses (LCAs) to prove the effective sustainability of the initiatives undertaken;
- awareness-raising initiatives and active involvement of employees towards a responsible use of plastics in daily activities.

**Alliance to End Plastic Waste (AEPW)** is a non-profit organization that aims to implement concrete solutions to the problem of plastic waste and, in particular, pollution of the marine environment, by investing USD 1.5 billion over five years. Versalis is among more than 70 globally operating companies that have joined.

## ALLIANCE TO END PLASTIC WASTE

Through the involvement of the whole supply chain, the Alliance promotes projects and collaborations basing its approach on four strategic pillars:

- **Infrastructure:** Systems to collect and manage plastic waste and recycling;
- **Innovation:** New technologies and solutions for a circular economy;
- **Education and involvement:** empowering stakeholders to understand and play their part;
- **Clean up:** Solutions to address plastic waste at source.

Versalis is also involved in circular economy working groups organised by leading national and international industry associations such as **Plastics Europe, Cefic** and **Federchimica**.

**For more information on alliances and other initiatives in which Versalis participates** [Alliances and other initiatives in Versalis](#)

Versalis participates in the Polyolefin Circular **Economy Platform (PCEP)** a Europe-wide platform for the development of circular solutions in the polyolefin supply chain and is a founding member of the Styrenics Circular Solution (SCS), a similar platform created in 2018 focused on styrenics products.

# Environment



## VERSALIS' COMMITMENT

"We have always cared about safety, the environment and the health of the people working at our sites and the communities that host our production facilities. In our commitment to the environment, we pay special attention to air quality, efficient and responsible use of water resources and waste management. We run our plants with well-established management systems that allow us to implement best production practices. The protection of the environment and ecosystems is an important lever for us, which is why we also join various national and international environmental protection alliances and programmes."

| PAOLO BALDRATI - HEAD OF QUALITY, HEALTH, SAFETY AND ENVIRONMENT |

## POLICIES AND OTHER REGULATORY INSTRUMENTS

Policies: "Sustainability", "The integrity in our operations", "Eni biodiversity and ecosystem services policy"; "Eni's commitment not to conduct exploration and development activities within the boundaries of Natural Sites included in the UNESCO World Heritage List"; Eni Positioning on Water; Code of Ethics.

## MANAGEMENT AND ORGANIZATION MODELS

Integrated environment, health and safety management system: certified in accordance with the ISO 14001:2015 environmental management standard; Application of the ESHIA (Environmental Social & Health Impact Assessment) process to all projects; Technical meetings for analysing and sharing experiences on specific environmental and energy issues; Sustainable Procurement Programme (JUST), to involve the whole supply chain; Site-specific circularity analysis; International Environmental Legislative Analysis; Working groups for defining the strategic positioning and objectives of Eni for the protection of water resources and biodiversity; Development of a single integrated methodology for environmental analysis, impact/risk assessment for the environment and organisation, including type 231, applicable in Italy and abroad; application of Environmental Golden Rules.



### AIR QUALITY

In line with the company's policies and regulatory instruments, Versalis considers continuous improvement of environmental performance among its objectives. In this context, **the management of atmospheric emissions, including odorous substances that may have an impact on local communities, is a key element for Versalis to constantly monitor.**

In 2021, Versalis' activities produced 1.99 thousand tonnes of NO<sub>2</sub>eq, and 0.084 thousand tonnes of SO<sub>2</sub>eq, in line with the 2020 performance of 1.82 thousand tonnes of NO<sub>2</sub>eq, and 0.089 thousand tonnes of SO<sub>2</sub>eq, respectively.

### WASTE MANAGEMENT

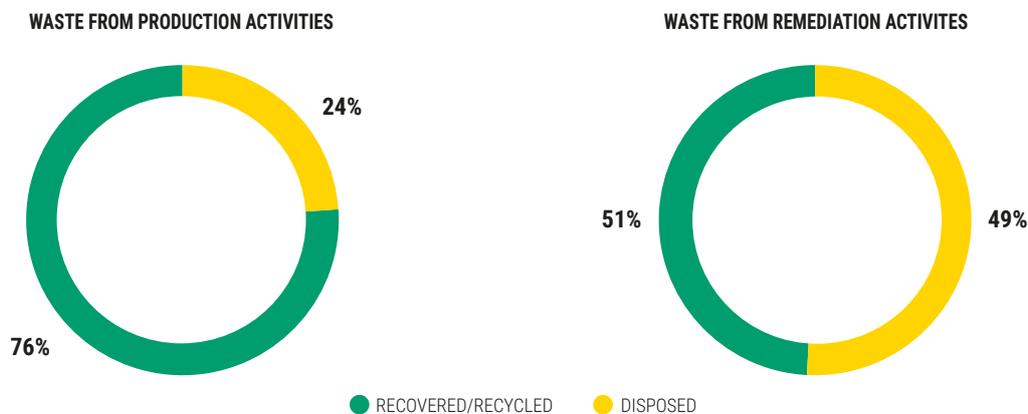
Waste produced by Versalis can

be classified into waste from **production activities and waste from remediation**. The difference lies in the activity that gave rise to them and the actions to be taken to manage and/or minimise them. In particular, waste from production activities is waste directly linked to the production of goods, while waste from reclamation is waste linked to reclamation activities (excavated soil and rocks, groundwater), demolition activities, excavation results and/or sludges, oils and equipment reclamation.

In the **management of its waste**, Versalis can rely on an intermediary which, for the Italian sites, is **Eni Rewind**; furthermore, for the management of registers, forms and, more generally, the detailed data of individual movements

required by the reference regulations, Versalis uses the same **management software** adopted by all Eni Business Units, which can provide **customised reporting on the monitoring of waste production.**

As at 31.12.2021, Versalis produced a total of 101.5 thousand tonnes of waste, of which about 60% related to production activities and the remaining 40% from remediation activities. With regard to waste from production activities, since 2015, Versalis has been committed to a process of increasing the share of waste sent for recovery and/or recycled, in line with its circular strategy. In particular, in 2021, **more than 76% of total waste from production activities was destined for recovery and/or recycling.**



## INITIATIVES TO IMPROVE AIR QUALITY AND HEALTH IMPACT ON LOCAL COMMUNITIES

### LEAK DETECTION AND REPAIR PROGRAMMES

The implementation of Leak Detection And Repair (LDAR) programmes is not limited to a simple acquisition of detailed information, but allows the necessary work on the installations to be optimised in a timely manner. In particular, for the concentrations detected, it is possible to define both 'intervention thresholds', above which it is necessary to proceed with remediation, and specific divergence targets in order to intervene with the most appropriate actions aimed at reducing the phenomenon. This activity makes it possible to improve environmental aspects and optimise the use of raw materials, intermediates and products.

### SITE-SPECIFIC MONITORING PROTOCOLS OF ODOROUS SUBSTANCES

In line with the internal HSE operating instructions and in relation to the diversity of each site, Versalis prepares specific protocols drawn up with the support of the Milan Polytechnic. These make it possible to assess the impacts on sensitive receptors in a timely manner, to identify any critical issues in terms of odour fallout and to define the containment measures to be implemented to reduce impacts on sensitive receptors.

## PROTECTION OF WATER RESOURCES

In recent years, at an international level, increasing anthropogenic pressures on water resources and the emergence of the concept of sustainable development have led to the implementation of major projects and programmes to conserve and save water resources.

For its production processes, Versalis uses:

- **freshwater**, respectively supplied from surface sources, wells and/or aqueducts/tanks;
- **sea water**, provided by coastal facilities.

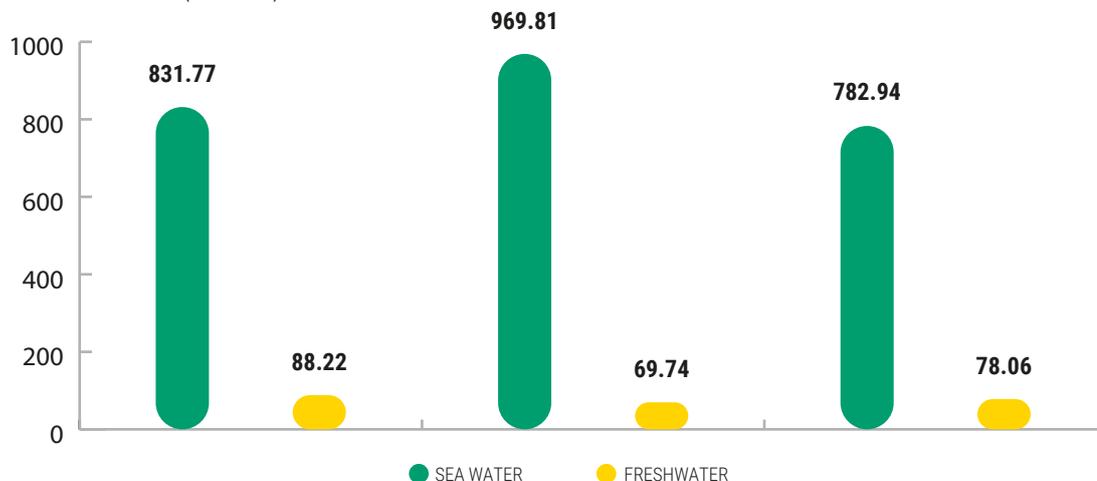
Other types of water, whether steam or demineralised water, are supplied by third-party companies, both Eni Group and external, located in the same site.

In 2021 Versalis drew a total of 861 million<sup>m<sup>3</sup></sup> of water (1,039.5 million<sup>m<sup>3</sup></sup> in 2020), of which more than 91% was sea water and the remainder fresh water. The latter represents a priority resource for Versalis, which has set itself the goal of keeping this withdrawal below or equal to 80 million<sup>m<sup>3</sup></sup> throughout the year (in 2021, 78.1 million<sup>m<sup>3</sup></sup>).

With regard to the quality of water

discharges, since Versalis sites are subject to environmental authorisations, the Company constantly monitors compliance with the provisions of the authorisations issued to individual sites. During the year, Versalis released about 93% of the water discharged into the sea, the remaining 7% was released into surface water and the sewerage system\*. With regard to industrial waste water discharges, these take place in some cases directly into the receiving water body, after treatment by Versalis, or by outsourcing the treatment service to an external provider.

WATER WITHDRAWALS (million m<sup>3</sup>)



Within the Porto Torres plant, Versalis is the largest consumer of demineralised water, produced with recovery from TAF, with a percentage exceeding 95% of the total distributed

## CONSUMPTION OF DEMINERALISED WATER RECOVERED FROM TREATED GROUNDWATER (TAF)

In its production plants, Versalis is one of the most significant users of demineralised water for its industrial activities. Although demineralised water production processes are not always managed directly by Versalis, the company aims to be the biggest beneficiary of water recovery and water saving initiatives. Examples of the rationalisation of water consumption within the production plants are realised at the Priolo and Porto Torres plants, where the demineralised water production plants use treated water recovered from the groundwater treatment plants (TAF), reducing the amount of water integration from natural resources. In 2021 at the Priolo site, at least 12% of Versalis's demineralised water requirements were met through the use of water recovered from the aquifer, duly pre-treated by Eni Rewind and fed by ERG's demineralised water production plant. The same type of recovery takes place at the Porto Torres plant, where the demineralised water production plant is normally fed by groundwater previously treated in Eni Rewind's TAF plants, possibly supplemented by industrial water. Versalis is the largest consumer of demineralised water at the site, and in 2021 the withdrawal of demineralised water amounted to around 95% of the total distributed.

\* The figure is calculated net of transfers to third parties, which represents a residual share of withdrawals.



## ALLIANCES, PARTNERSHIPS AND PROGRAMMES TO PROTECT THE ENVIRONMENT AND THE SEAS

Versalis's environmental commitment is also embodied in its adhesion to voluntary programs and associations for the protection of water resources, with particular focus on the phenomenon of marine littering, including the **Operation Clean Sweep®** programme.

The dispersion of plastics in the marine environment is a problem that the European chemical industry is tackling with awareness-raising actions and initiatives involving concrete commitments from companies throughout the value chain. One of the most relevant initiatives is the **voluntary program Operation Clean Sweep®, promoted in Europe by Plastics Europe, with the aim of preventing and reducing the loss of plastic granules and dust into the environment**, commonly known as pellets, identified as one of the sources of microplastic pollution in the seas, and achieving the common goal Zero Pellet Loss.

The effectiveness of the program is based on the following fundamentals:

- on affected sites, mapping of potential release points, assessment of leakage sources, planning of prevention and mitigation actions to minimise risk;
- revisiting the existing system of procedures with additional guidance on the specific topic;
- regular monitoring and verification of the effectiveness of the actions taken and possible corrective actions;
- dissemination and promotion of the program within the company starting from top management and reaching all employees on all sites where the subject matter is applicable;
- specific and periodic training of the personnel in charge;
- raising awareness among business partners, both suppliers and customers, through information and promotion.

**Versalis has been a member of the program with reference to its control scope since March 2015 and contributes to the preparation of**

**Plastics Europe's annual membership report by providing the necessary data on a regular basis; this report includes the status of the programme and the progress made by member companies and the plastics supply chain. Moreover, Versalis promotes the Program even outside the company sphere, working as in an associate capacity and participating in Plastics Europe's group activities.**

To further support the ongoing commitment of the plastics supply chain in preventing and reducing the release of plastic pellets into the environment, it is noted that a **certification scheme verifiable by a third party and applicable to the entire supply chain is being defined.**

The certification scheme can be integrated into existing environmental management systems and will allow **evaluation of, and demonstrate in a transparent way, the efforts of each operator in the chain of the OCS programme's implementation.**

Plastics Europe aims to certify all of its members' sites according to this scheme during the three-year period 2023/2025.



# Responsible procurement



## VERSALIS' COMMITMENT

"The need for a more sustainable and circular world pushes us to make choices that are increasingly oriented towards incentivising behaviour aimed at respect and attention to social aspects and environmental protection. This goal, within a broader Eni strategy, can only be achieved through the active involvement of the entire value chain."

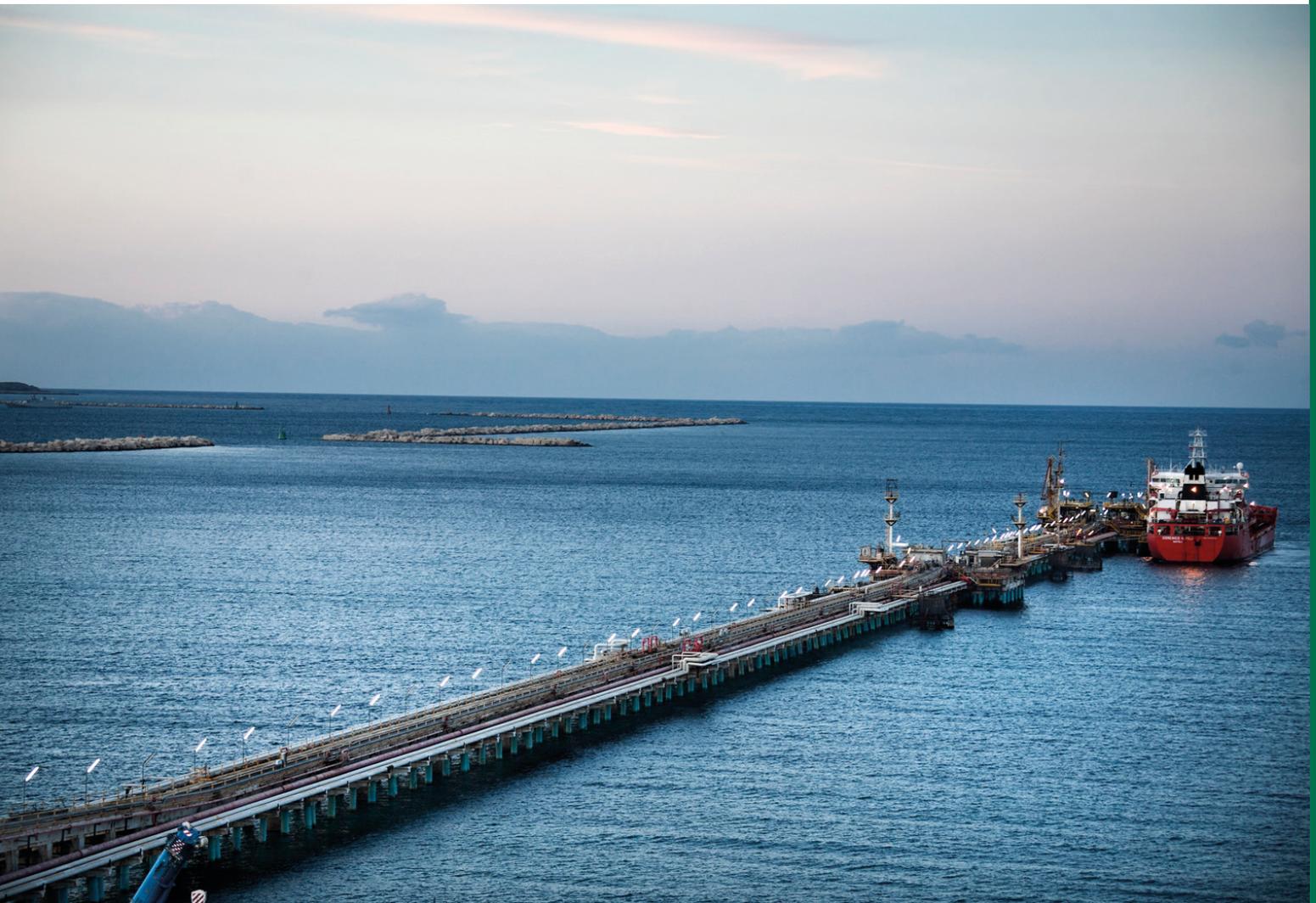
| STEFANO CIPOLLINA - HEAD OF PROCUREMENT AND CONTRACT SERVICES |

## POLICIES AND OTHER REGULATORY INSTRUMENTS

Supplier Code of Conduct, Eni's position on Conflict Minerals ; "Our Value Chain Partners' Policy"; Eni's Code of Ethics; Eni's Statement on Respect for Human Rights; Eni's Slavery and Human Trafficking Statement.

## MANAGEMENT AND ORGANIZATION MODELS

Sustainable Procurement process designed to check suppliers' compliance with Eni requirements for reliability, ethical conduct and integrity, economic, technical-operational, health, safety, environmental and human rights protection and Technological-Digital excellence; Sustainable Procurement Programme (JUST): a set of initiatives to involve the entire supply chain in measuring and managing the ESG performance of the Eni Supply Chain; Vendor Development: a unit dedicated to developing suppliers by defining growth and transformation paths along the lines of "Energy transition and sustainability", "Economic-financial soundness" and "Technological-digital Excellence".



## THE VERSALIS SUPPLY CHAIN

Versalis aims to foster a fair and inclusive energy transition and involve companies in the supply chain in innovation and industrial transformation initiatives in the economic, social and environmental fields. Sustainability elements are an integral part of the whole procurement process, with the aim of sustainable development of supply chains, through the direct involvement of suppliers by means of communication campaigns and engagement initiatives (workshops, call for ideas), sharing of support tools and best practices (Open-es, Basket Bond), and integration of sustainability elements in technical specifications and tender evaluations through rewarding mechanisms.

In 2021, the main initiatives undertaken to stimulate and support suppliers on the path to improving ESG performance were:

- Integration of supplier evaluation criteria, both in qualification and in tenders, with the evaluation of technological aspects, such as cyber security, and of sustainability, with reference both to environmental issues, such as energy efficiency, (use of recycled materials, waste disposal methods) and social and governance impacts (gender equality in teams, employment levels, the preparation of a sustainability report);
- Implementation of a human rights model, inspired by the principles of the SA8000 international standards, with criteria that take into account country risk and the types of activities carried out by suppliers;
- business training with webinars dedicated to cyber risks, workshops with suppliers on sustainability issues (packaging, transport, etc.);
- creation of a digital platform, (Open-es), which is open to and free of charge for all Eni suppliers and aims to measure and improve sustainability aspects;
- development, with Elite and Illimity Bank, of an innovative financial instrument, the Sustainable Energy Basket Bond, open to the energy sector to finance, through minibonds, projects and investments aimed at sustainable development;
- strengthening of contractual standards to include requirements for the protection of human rights and cyber security.

The consolidation of know-how for sustainable supply chain development is not only aimed at suppliers, but also at internal resources. In fact, in 2021 all the procurement resources in Italy were trained on the human rights model, on new tools developed to support sustainability initiatives (e.g. Open-es platform and JUST, the program aimed at involving suppliers in the energy transition path) and on ESG issues.

### FOCUS ON

Biomass of agricultural and forestry origin for the biomass power plant comes from a radius of no more than 70 km from the Versalis Crescentino plant

## LOCAL PROCUREMENT AT THE CRESCENTINO SITE

The procurement of biomass for boiler combustion at the Crescentino site complies with the requirements of Italian Ministerial Decree of 2 March 2010 on the traceability of biomass for electricity production. For this reason, the biomasses of agricultural and forestry origin used in the Crescentino (VC) plant come exclusively from short supply chains, respecting the sustainability criteria outlined in the European Union directives.

In addition, the biomass used as raw material for bioethanol production is subject to the supply chain sustainability's traceability, guaranteed by the ISCC-EU certification acquired in 2021.

The local provenance of the raw material results in numerous positive effects for the area's small and medium-sized agricultural/forestry enterprises, such as an increase in the number of employees, guaranteed and continuous take-back of wood waste, and a fixed market value of the biomass throughout the year.

# Transparency in business management



In line with Eni's regulatory system, Versalis has adopted all the anti-corruption regulatory instruments issued by the Parent Company, including the **Anti-Corruption MSG** and all the documents that make up **Eni's Anti-Corruption Compliance Program**. The Company has also implemented Eni's Code of Ethics and has adopted its own Organizational, Management and Control Model pursuant to Legislative Decree 231/2001, as amended.

## ENI'S ANTI-CORRUPTION COMPLIANCE PROGRAM

Consistent with the principle of 'zero tolerance' expressed in the Code of Ethics, Eni has adopted the **Anti-Corruption Compliance Program**, an articulated system of rules and controls valid for the entire Group, aimed at preventing corruption offences, drawn up taking into account current na-

tional and international anti-corruption provisions and sector best practices. The implementation of the Anti-Corruption Compliance Program has been guaranteed, since 2010, by a dedicated Eni organizational structure (Anti-corruption Unit) which provides specialized anti-corruption support, with particular reference to the assessment of the reliability of potential counterparties at risk ("anti-corruption due diligence"), to the management of any critical issues that emerge and the development of the relevant contractual safeguards.

A further pillar of Eni's Compliance Program is **anti-corruption training**. In particular, **more than 12,000 hours of training on compliance and anti-corruption issues** were provided to Versalis employees in 2021 through distance/e-learning/ info/training and refresher courses.

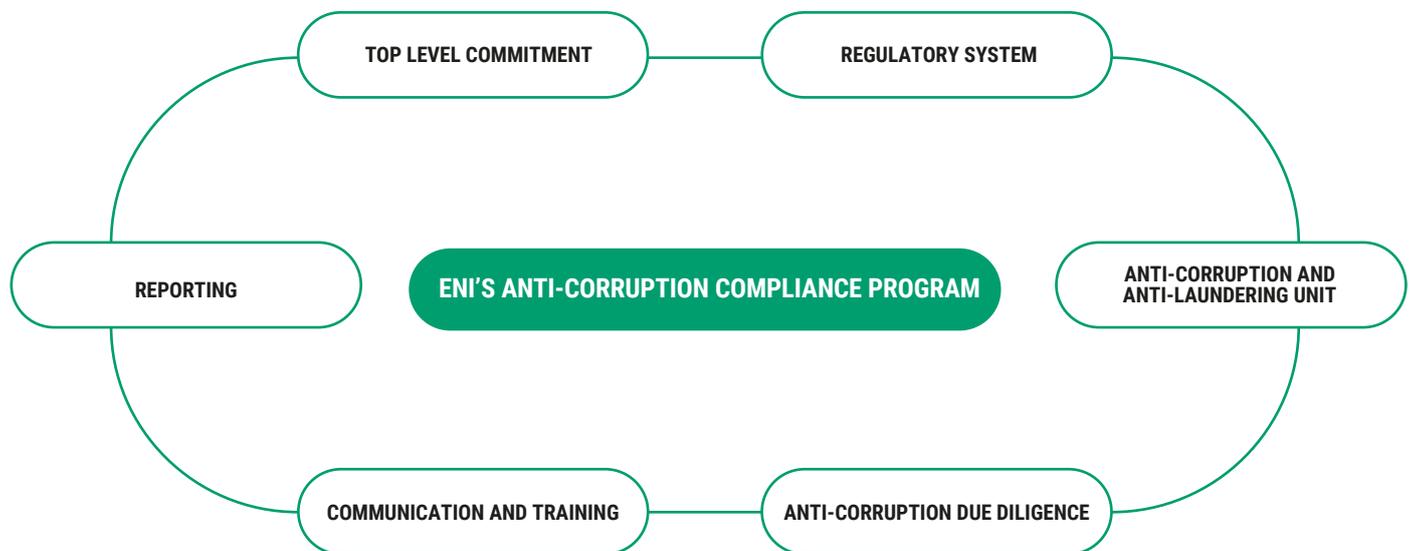
## WHISTLEBLOWING PROCESS

Eni has internal regulations, most recently updated in 2020, aligned with national and international best practices as well as the relevant Italian legislation (L 179/2017). It regulates the whistleblowing process, i.e. the receipt, analysis and processing of whistleblowing reports received, also in confidential or anonymous form, by Eni and its subsidiaries in Italy and abroad. This internal procedure allows employees and third parties, to report facts relating to the Internal Control and Risk Management System and concerning behaviours in violation of the Code of Ethics, any laws, regulations, provisions of authorities, internal regulations, Model 231 or Compliance Models for foreign subsidiaries, that may cause damage or prejudice to Eni, even if only to its public image.

6 Report files for which investigation was completed in 2021.

The investigations carried out did not prove the facts.

1 File for which improvement actions have been taken anyway



# Alliances for development



Eni is committed in promoting alliances for development through the enhancement of the resources of the Countries in which it operates, promoting access to electricity and promoting Local Development Programmes - LDPs) with a broad portfolio of initiatives in favour of communities. This distinctive approach of Eni, referred to as Dual Flag, is based on a system of collaborations with other internationally recognised players in order to identify the needs of communities in line with the National Development Plans and the United Nations 2030 Agenda. Eni is also committed to creating job opportunities and transferring its know-how and expertise to its local partners.

Versalis recognises the importance of supporting a fair and accessible transformation path and therefore is committed to establishing relationships with customers and suppliers, based on transparency, trust and dialogue, and to developing lasting local partnerships and alliances with all the players involved in its value chain, contributing to the development of the territories in which it operates.

# Relationship with local communities and customers



## VERSALIS' COMMITMENT

"For us, quality of service and relationship with business partners are key factors for the success and positioning of the company. Our commitment in establishing lasting relationships based on mutual trust over the years has enabled us to create real partnerships for the development of new products and innovative projects."

| FABIO ASSANDRI - HEAD OF BUSINESS DEVELOPMENT STRATEGIES AND LICENSING |



"Promoting constant dialogue with the communities and territories that host our production sites is a fundamental factor for our activities. Collaboration and participation, mutual knowledge, and the sharing of know-how and experience, contribute to the creation of shared value with all local stakeholders, to the constant improvement of our initiatives and to the achievement of our sustainability goals."

| BERNARDO CASA - HEAD OF INDUSTRIAL |

## POLICIES AND OTHER REGULATORY INSTRUMENTS

"Sustainability" policy; Eni statement on Respect for Human Rights; Eni Code of Ethics; "Alaska Indigenous Peoples" policy.

## MANAGEMENT AND ORGANIZATION MODELS

Presence of sustainability contact persons at local level, to define development programmes for local communities in line with national development plans, integrating business processes; Application of ESHIA process in all business projects; Stakeholder Management System platform for managing and monitoring relations with stakeholders; System for identifying, mitigating and monitoring risks linked to relations with local stakeholders; Process for managing sustainability in the business cycle and design specifications according to international methodologies (e.g. Logical Framework); Management system for social responsibility compliant with SA8000.



60 new recruits at the Crescentino plant following the acquisition

## RELATIONSHIPS WITH THE TERRITORIES

Versalis considers the relationship with local stakeholders to be an important element of confrontation and value creation. For this reason it tracks and examines all requests received in order to implement development projects, shared with local communities,

and consistent with a sustainable development. Every type of interaction with the territory is monitored through the 'Stakeholder Management System - SMS', which allows, among other functions, to respond quickly and effectively to possible critical situations and to control and reduce potential problems related to the

relationship with stakeholders.

For more information: see Stakeholder engagement activities p. 22

Among the activities carried out by Versalis in recent years that have created value for the territory, the environment and communities are the following:

## POSITIVE SOCIAL IMPACTS FOLLOWING THE ACQUISITION OF THE CRESCENTINO SITE

Versalis has acquired, with effect from 1 November 2018, the business units relating to the 'organic perimeter' activities of the Mossi & Ghisolfi Group. The acquired branch includes human resources and instrumental assets, both tangible and intangible, related to the development, industrialisation, licensing of biochemical technologies and processes based on the use of renewable sources from biomass.

With this important acquisition, **Versalis not only continues its efforts to strengthen its competitive position in the renewable chemicals business**, whose activities have been merged into the Biochem - formerly Biotech - business unit, but also plays a key role in the development of the region concerned.

In fact, the acquisition of the Crescentino site in return for payment **allowed the stabilisation of the local supply chain, as well as the direct workforce of 78 resources, which was progressively increased, thanks to a significant recruitment plan that allowed the entry of about 60 resources.** To date, the site employs about 130 people, with prospects for growth. The site also makes use of personnel from third-party companies every day, with an average daily presence of around 100 units.

The Rivalta Scrivia site has also been the subject of a recruitment plan that has led to the entry of about 15 units since the acquisition.

From the outset, an intense and constant dialogue was initiated with the trade unions aimed at integrating the Crescentino and Rivalta Scrivia sites with the Group's organizational processes and company regulations. Particular attention was paid to the immediate application of the welfare measures in force in Versalis, such as health coverage, through the stipulation of the insurance policy that supplements the benefits provided by the sector funds, membership of Fasen (Social Services Activity Fund for Employees of Energy Sector Companies), and the extension of services and conventions valid for Eni employees. Among the union agreements signed in the integration process, the following agreements are worth mentioning:

Extension of the participation bonus by converting it into welfare works and services and introduction of the 14th monthly payment

Adjustment of catering treatment to current value in Versalis

Agreements on shift patterns, contractual extras and working time

During the year, the policy of strengthening territorial presence continued with the cooperation with local authorities and the hiring of additional new staff.

The activities conducted by Versalis at the Crescentino site testify to the company's commitment to Just Transition, contributing positively to the transformation of the current energy and economic system, sharing the social and economic benefits with all the workers and communities involved.



## SUPPORT FOR THE SECURING OF THE ORIENTED NATURE RESERVE SALINE DI PRIOLO

On July 10 2019, a fire destroyed a large part of the Oriented Nature Reserve Saline di Priolo, killing hundreds of plant and animal species. The Reserve, established by the Region of Sicily in 2000 and managed by LIPU - Lega Italiana Protezione Uccelli (Italian League for the Protection of Birds) - safeguards an area in which about 40% of all bird species observed in Italy to date have been recorded.

In this context, **Versalis and Eni Rewind supported LIPU during the spring/summer of 2020 in securing the main paths** by pruning and removing hundreds of burnt trees that were obstructing the access to the reserve, and preparing areas for the planting of typical Mediterranean flora species, in order to recover the sustainable use of the reserve's ecosystem and restore its role as a naturalistic and touristic reference point for the area.

Versalis and Eni Rewind supported LIPU in securing the main paths in the Priolo Nature Reserve in 2020

## WOMEN'S EMPOWERMENT ACTIVITIES IN GHANA

As part of the local cooperation contract with the Diocese of Sekondi-Takoradi, during 2020 Versalis supported the start of an educational program, which continued in 2021, for more than 90 women and young girls from the western region of Ghana (Nyankrom village and surroundings). The training program was aimed at enhancing technical skills and abilities, such as tailoring and crochet, in order to facilitate the start-up of income-generating economic activities. Making young women economically self-sufficient is a fundamental element for a lasting and sustainable improvement of the living conditions of their families, and, therefore, for the entire community. The good results achieved with this initiative have laid the groundwork for evaluating possible further interventions and initiatives to keep supporting local communities in Ghana. In this regard, the cooperation with the Sekondi-Takoradi Diocese was extended in the first half of 2022 for the continuation of the program.

Cooperation in Ghana between Versalis and the Diocese of Sekondi-Takoradi for the vocational training of 90 women and young girls



## GUAYULE PROJECT IN BASILICATA FOR THE VALORISATION OF THE AREA

Versalis is involved in local development projects that leverage the collaboration and the sharing of know-how and skills with local companies.

One example is the Guayule shrub experimental study in Basilicata, which is part of a broader Eni project to diversify agronomic activities in the region. The initiative involves the University of Bari, the Lucanian Agency for Development and Innovation in Agriculture (ALSIA) and local farms on the territory. The aim of the experimental initiative is to carry out a feasibility study for the development of an optimised agronomic protocol for the cultivation of the Guayule shrub to be used for the production of natural rubber and other derived products (e.g. resins) as a sustainable alternative to production from Hevea Brasiliensis.

## Customer relationship management

Versalis interfaces with different types of customers, almost exclusively business-to-business (b2b), ranging from large multinational companies, with a large volume of business, to small national companies, with a smaller volume of supplies. Each Business Unit (BU) has its own diversified customer portfolio, which varies in number according to the type of goods and services offered, and manages customer relations independently through periodic update meetings organised by the internal marketing and sales functions.

At regular meetings, the current business results and the prospective market scenario for raw materials and customers are discussed, and new projects of interest as well as the progress of ongoing R&D initiatives are presented. In addition to commercial, development and market aspects, increasing attention is being paid to sustainability issues and the actions Versalis is developing to manage climate change challenges. Information is also shared through specific questionnaires or internationally used platforms, such as EcoVadis,

which make information on the company's development strategy available to stakeholders.

From a business perspective, customers, especially large companies, are strongly committed to circularity, decarbonization and sustainability projects, and therefore demand increasingly innovative, sustainable and circular technology solutions. Versalis, anticipating this trend, offers the market a wide range of products with high quality and performance standards that incorporate sustainability characteristics.

### FOCUS ON

80% less CO<sub>2</sub> emissions and 75% less energy consumption compared to road transport

#### RAILWAY SIDING IN THE MANTUA FACTORY IN PARTNERSHIP WITH RADICI GROUP

In agreement with Radici Group, K Oil's customer for the production of textile fibres and polymers, a joint initiative was undertaken during the year 2020 in Mantua and becoming fully functioning in April 2021.

With the perspective of reducing CO<sub>2</sub> emissions, improving transport safety and saving energy and costs, a new rail siding was built inside the Versalis plant in Mantua to allow raw materials to be loaded and transported to the Radici plant by train, instead of by tanker truck. Thanks to this investment, it has been estimated that, with equal kilometres travelled, rail transport allows a considerable reduction in CO<sub>2</sub> emissions (-80%) and primary energy consumption (-75%) compared to traditional road transport. In addition, the number of lorries leaving Mantua on a daily basis has been significantly reduced, with a monthly reduction of around 150 to 200 vehicles, thus reducing the risk of accidents on the road.



## CUSTOMER SATISFACTION

Versalis, in accordance to the general objectives of increasing competitiveness and in line with Eni's strategies, believes that attention to customers, a culture of quality and the continuous improvement of products and corporate processes, constitute a strategic element for pursuing success in the reference markets.

Versalis periodically analyses its context, considering the **satisfaction of all stakeholders, internal and external**, as a fundamental tool to improve and make its success lasting. All processes are structured in such a way that each product/service is delivered in accordance with the **customer's** needs and expectations, to ensure customer satisfaction and loyalty through a **sustainable development model** that combines profit logic with an awareness of the val-

ues of responsibility towards the community and the environment.

Continuous dialogue with customers by all functions is a key element for Versalis in its constant search for initiatives to maximise business results. In fact, all organizational units are systematically involved in the customer service and complaint resolution process. In particular, performance indicators are defined for each process and the methods of data collection and analysis are established for the products and services provided. Periodic 'Customer satisfaction' surveys are carried out with the primary purpose of gathering customer perceptions on aspects such as:

- **Company**, in terms of reputation and image, corporate social responsibility and sustainability;
- **Product delivered**, in terms of

performance, quality consistency, innovation and packaging;

- **Service offered**, in terms of availability, punctuality, flexibility, quality of delivery;
- **Front Office**, which includes the ease of response and the speed and effectiveness of the response.

Continuity of supply and the demand for joint developments for applications are indicators of loyalty that are constantly monitored.

Versalis constantly endeavours to **involve all personnel** so that they contribute with their conscious and proactive work, their suggestions and skills, to the realisation of the company's objectives of dialogue and positive interaction with customers, ensuring that everyone understands their importance and undertakes to respect them.

By intercepting market needs, Versalis is able to understand its customers' needs and offer competitive, sustainable and innovative solutions



# Key sustainability indicators

## CARBON NEUTRALITY BY 2050

Emissions		2019	2020	2021
<b>Direct GHG emissions - Scope 1</b>	(million of tonnes of CO <sub>2</sub> eq.)	<b>2.87</b>	<b>2.78</b>	<b>2.91</b>
of which: CO <sub>2</sub> equivalent from combustion and from process		2.87	2.73	2.85
of which: CO <sub>2</sub> equivalent from flaring		0	0.05	0.06
of which: CO <sub>2</sub> equivalent from methane fugitive emissions		0.005	0.005	0.003
Direct GHG emissions - Scope 1 for gas	(million of tonnes of CO <sub>2</sub> eq.)			
CO <sub>2</sub>		2.84	2.75	2.88
CH <sub>4</sub>		0.01	0.01	0.01
N <sub>2</sub> O		0.02	0.02	0.02
CO <sub>2</sub> emissions from installations subject to the EU ETS	(million of tonnes of CO <sub>2</sub> )	2.82	2.72	2.85
Allocations to installations subject to the EU ETS	(million of tonnes of CO <sub>2</sub> )	2.60	2.53	2.48
<b>Indirect GHG emissions (Scope 2)</b>	(million of tonnes of CO <sub>2</sub> eq.)	<b>1.86</b>	<b>1.75</b>	<b>1.72</b>

Energy consumptions		2019	2020	2021
<b>Electricity produced by source*</b>	(GWh)	<b>0</b>	<b>54.97</b>	<b>71.01</b>
of which: from natural gas		0	3.22	2.06
of which: from other sources		0	51.75	68.95
<b>Primary source consumption</b>	(millions of toe)	<b>1.35</b>	<b>1.22</b>	<b>1.28</b>
of which: natural/fuel gas		1.30	1.17	1.21
of which: other petroleum products		0.04	0.05	0.04
of which: biomass		0	0.004	0.03
<b>Energy purchased from other companies</b>	(millions of toe)	<b>0.87</b>	<b>0.86</b>	<b>0.86</b>
Electricity		0.43	0.41	0.42
Other sources		0.43	0.45	0.45
<b>Total energy consumed</b>	(millions of toe)	<b>2.22</b>	<b>2.08</b>	<b>2.14</b>

Fuel savings		2019	2020	2021
Fuel savings from energy-saving projects	(thousand toe/year)	<b>20.18</b>	<b>28.60</b>	<b>39.23</b>

\* Electricity production in 2020 is affected by the commissioning of the biomass power plant at the Versalis plant in Crescentino in January.

## OPERATIONAL EXCELLENCE

### PEOPLE

Employment		2019	2020	2021
<b>Employees as at 31st December</b>	(number)	<b>5,324</b>	<b>5,268</b>	<b>5,129</b>
Men		4,637	4,576	4,455
Women		687	692	674
Italy		4,301	4,249	4,115
Outside Italy		1,023	1,019	1,014
Africa		1	3	4
The Americas		15	16	19
Asia		43	39	32
Australia and Oceania		0	0	0
Rest of Europe		964	961	959
Under 30 age group		463	415	403
30-50 age group		2,913	2,822	2,753
Over 50 age group		1,948	2,031	1,973
<b>Employees abroad by type:</b>	(number)			<b>1,014</b>
Locals		988	986	995
Italian expatriates		31	27	14
International expatriates (including Third Country Nationals)		4	6	5
<b>Employees by professional category:</b>	(number)			
Senior managers		114	108	103
Middle managers		890	879	838
Office workers		2,447	2,486	2,437
Blue collar workers		1,873	1,795	1,751
<b>Employees by educational qualification:</b>	(number)			
University Degree		1,364	1,366	1,350
Secondary school diploma		3,169	3,153	3,069
Less than secondary school diploma		791	749	683
<b>Seniority:</b>	(years)			
Senior managers		24.17	24.84	24.91
Middle managers		20.62	23.19	22.76
Office workers		22.79	21.05	21.25
Blue collar workers		15.18	15.60	15.55
Local employees abroad	(%)	96.58	96.76	98.13
<b>Local employees abroad by professional category:</b>	(number)			
Senior managers		9	9	9
Middle managers		127	135	132
Office workers		444	439	452
Blue collar workers		408	403	402
Local senior managers & middle managers abroad	(%)	13.29	14.13	13.91
Non-Italians employees in positions of responsibility		126	77	82
Permanent employees	(number)	5,294	5,242	5,094
Fixed-term employees		30	26	35
Full-time employees		5,256	5,208	5,072
Part-time employees		68	60	57
Average age	(years)	45	46	46
Permanent hires	(number)	234	86	145

(continued)

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Employment	2019	2020	2021
<b>Permanent contract resolutions</b>	<b>140</b>	<b>146</b>	<b>287</b>
of which: resignations	59	37	64
of which: retirements	65	82	120
of which: number of redundancies	5	4	14
of which: other	11	23	89
Rate of Turnover	(%) 7.16	4.38	8.24

Equal opportunities	2019	2020	2021
Female employees in service	(%) 12.90	13.14	13.14
Women recruited	21.37	13.95	20.69
<b>Women by professional category</b>			
Women in positions of responsibility (senior and middle managers)	20.52	20.97	21.47
Senior managers	11.40	11.11	13.59
Middle managers	21.69	22.18	22.43
Office workers	18.64	18.50	18.42
Blue collar workers	1.33	1.39	1.31
<b>Replacement rate by gender</b>	<b>1.67</b>	<b>0.59</b>	<b>0.51</b>
Men	1.55	0.55	0.48
Women	2.38	1.00	0.64

Training	2019	2020	2021
Participations*	(number) 68,672	73,708	67,856
<b>Training hours by type</b>	(hours) <b>259,312</b>	<b>181,744</b>	<b>183,766</b>
HSE and quality	102,573	94,303	115,259
Languages and IT	6,842	3,303	4,440
Behaviour/Communication/Institutional	12,119	21,439	21,233
Professional - transversal	18,769	9,646	12,483
of which: anti-corruption	6,734	1,137	461
Technical - commercial professional	119,009	53,053	30,351
of which: compliance	27,024	18,490	11,778
<b>Total hours of training by professional category</b>	<b>259,312</b>	<b>181,744</b>	<b>183,766</b>
Senior managers	6,664	2,362	4,575
Middle managers	47,310	24,128	39,406
Office workers	126,138	80,255	79,601
Blue collar workers	79,200	74,999	60,184
<b>Average training hours per employee per job category</b>	<b>49</b>	<b>34</b>	<b>44</b>
Senior managers	59	21	44
Middle managers	55	27	47
Office workers	52	22	33
Blue collar workers	42	41	34
<b>Internal teaching hours</b>	(%) <b>53</b>	<b>73</b>	<b>72</b>

\* Incomplete participation is included, while enrolments with no participation are excluded.

Industrial relations		2019	2020	2021
Employees covered by collective bargaining	(number)	5,267	5,154	5,010
<b>Employees covered by collective bargaining agreements</b>	(%)			
Italy		100	100	100
Outside Italy		95.7	85.8	85.8
Consultations, negotiations with trade unions on organizational changes	(number)	0	0	0
Employees who are members of a trade union		2,740	2,725	2,645
Employees who are members of a trade union	(%)	62.8	62.5	63.6

## HEALTH AND SAFETY

Health		2019	2020	2021
Number of deaths which result from occupational diseases	(number)	0	0	0
Employees included in health surveillance programs		4,835	5,014	4,879
<b>Health surveillance</b>				
of which: visits*		6,912	5,977	6,918
of which: to employees		6,903	5,973	6,914
of which: to contractors		0	0	0
of which: to others		9	4	4
of which: examinations**		93,215	78,077	78,758
of which: to employees		93,162	78,065	78,748
of which: to contractors		0	0	0
of which: to others		53	12	10
<b>Health care</b>				
of which: services***		140	26	180
of which: to employees		140	26	180
of which: to contractors		0	0	0
of which: to others		0	0	0
of which: visits		2,939	1,614	1,554
of which: to employees		2,515	1,396	1,325
of which: to contractors		424	217	229
of which: to others		0	1	0
<b>NUMBER OF REGISTRATIONS FOR HEALTH PROMOTION INITIATIVES</b>		<b>7,633</b>	<b>5,579</b>	<b>6,262</b>
of which: to employees		7,433	5,579	6,262
of which: to contractors		200	0	0
of which: to family members		0	0	0
OIFR Occupational Illness Frequency Rate	(reports of occupational disease /hours worked) x 1,000,000	0.55	0.12	0.24
<b>Occupational illness reports received</b>	(number)	<b>5</b>	<b>1</b>	<b>2</b>
Employees		0	0	1
Previously employed		5	1	1

\* Health surveillance includes periodic visits, specialist visits (ophthalmological, dermatological, orthopaedic, cardiological, neurological, other) and other types of visit.

\*\* Health surveillance examinations include instrumental analyses and laboratory tests.

\*\*\* Health care services include specialist visits, admissions, instrumental analyses and laboratory tests.

Safety		2019	2020	2021
<b>Total recordable incident rate (TRIR)</b>	(total recordable injuries/hours worked) x 1,000,000	<b>0.26</b>	<b>0.77</b>	<b>0.71</b>
Employees		0.24	0.83	0.72
Contractors		0.28	0.70	0.69
Italy		0.24	0.64	0.63
Outside Italy		0.34	1.34	1.06
<b>Index of accidents at work with serious consequences (excluding fatalities)</b>	(serious injuries/hours worked) x 1,000,000	<b>0</b>	<b>0</b>	<b>0.13</b>
Employees		0	0	0
Contractors		0	0	0.28
<b>Lost time injury frequency (LTIFR)</b>	(Number of accidents with days of absence from work/hours worked) x 1,000,000	<b>0.26</b>	<b>0.64</b>	<b>0.64</b>
Employees		0.24	0.60	0.72
Contractors		0.28	0.70	0.55
Italy		0.24	0.64	0.63
Outside Italy		0.34	0.67	0.71
<b>Injury severity score</b>	(days of absence/hours worked) x 1,000	<b>0.02</b>	<b>0.02</b>	<b>0.07</b>
Employees		0.03	0.02	0.02
Contractors		0.02	0.02	0.14
<b>Fatality index</b>	(fatal accidents/hours worked) x 100,000,000	0	0	0
Employees		0	0	0
Contractors		0	0	0
<b>Number of deaths as a result of accidents at work</b>	(number)	<b>0</b>	<b>0</b>	<b>0</b>
Employees		0	0	0
Contractors		0	0	0
Near misses	(number)	100	82	99
<b>Number of hours worked</b>	(millions of hours)	<b>15.5</b>	<b>15.5</b>	<b>15.6</b>
Employees		8.3	8.4	8.3
Contractors		7.2	7.1	7.2
<b>Hours of safety training</b>	(hours)	<b>87,695</b>	<b>83,011</b>	<b>31,103</b>
of which: to senior managers		856	471	630
of which: to middle managers		11,809	8,115	6,969
of which: office workers		35,919	38,195	14,806
of which: to blue collar workers		39,111	36,230	8,698
<b>Process safety events</b>	(number)	<b>11</b>	<b>7</b>	<b>3</b>
Tier 1		3	2	2
Tier 2		8	5	1

## ENVIRONMENT

Water Resource		2019	2020	2021
<b>Total water withdrawals</b>	(millions of cubic metres)	<b>919.99</b>	<b>1,039.52</b>	<b>861.00</b>
of which: seawater		831.77	969.81	782.94
of which: fresh water		82.20	69.74	78.06
of which: withdrawn from surface water		66.35	46.47	54.91
of which: withdrawn from underground		3.79	3.27	4.03
of which: withdrawn from aqueduct or tank		2.82	3.08	3.13
Reuse of freshwater	%	89.30	92.50	92.02
<b>Total water discharge</b>	(millions of cubic metres)	<b>914.40</b>	<b>1,030.78</b>	<b>852.97</b>
of which: at sea		840.56	978.24	792.64
of which: in surface waters		63.89	43.87	51.69
of which: in the sewerage system		6.14	4.68	5.25
of which: sold to third parties (including steam)		3.81	4.00	3.39

Air quality		2019	2020	2021
NO <sub>x</sub> (nitrogen oxides) emissions	(thousands of tonnes NO <sub>2</sub> eq.)	1.92	1.82	1.99
SO <sub>x</sub> (sulphur oxides) emissions	(thousands of tonnes of SO <sub>2</sub> eq.)	0.08	0.09	0.08
NM VOC emissions (Non-Methane Volatile Organic Compounds)	(thousands of tonnes)	2.37	2.34	2.12
PST emissions (Total Suspended Particulate)	(thousands of tonnes)	0.02	0.01	0.02

Waste		2019	2020	2021
<b>Waste generated from production activities</b>	(tonnes)	<b>58,284</b>	<b>63,414</b>	<b>60,513</b>
of which: hazardous		40,460	41,902	39,046
of which: non hazardous		17,824	21,512	21,467
<b>Waste from production activities which was disposed of and recovered/recycled</b>	(tonnes)	<b>58,127</b>	<b>64,367</b>	<b>59,753</b>
of which: hazardous	(tonnes)	40,643	42,229	38,191
of which: incinerated	(%)	13.79	12.82	12.77
of which: sent to landfill		0.04	0.38	0.09
of which: subjected to chemical/physical/biological treatment		3.47	2.36	0.83
of which: sent for other disposal		8.41	18.18	12.28
of which: recovered/recycled		74.29	66.26	74.04
of which: non hazardous	(tonnes)	17,484	22,138	21,562
of which: incinerated	(%)	1.06	0.15	0.97
of which: sent to landfill		1.11	1.06	0.41
of which: subjected to chemical/physical/biological treatment		4.26	3.06	2.29
of which: sent for other disposal		8.97	14.74	16.09
of which: recovered/recycled		84.60	80.99	80.24
<b>Waste generated from remediation activities</b>	(tonnes)	<b>30,987</b>	<b>47,269</b>	<b>41,042</b>
of which: hazardous		6,277	7,277	6,851
of which: non hazardous		24,710	39,992	34,191

(continued)

<b>Reclamation waste disposed of and recovered/recycled</b>	(tonnes)	<b>28,849</b>	<b>47,020</b>	<b>43,400</b>
of which: hazardous	(tonnes)	5,343	8,848	6,786
of which: incinerated	(%)	13.40	3.77	9.76
of which: sent to landfill		0.15	0.07	0.09
of which: subjected to chemical/physical/biological treatment		12.28	36.27	5.67
of which: sent for other disposal		72.82	59.03	78.94
of which: recovered/recycled		1.35	0.85	5.54
of which: non hazardous	(tonnes)	23,506	38,172	36,614
of which: incinerated	(%)	0.18	0.003	0
of which: sent to landfill		29.28	21.31	10.62
of which: subjected to chemical/physical/biological treatment		16.00	7.23	10.16
of which: sent for other disposal		17.94	16.66	19.28
of which: recovered/recycled		36.59	54.80	59.94

## RESPONSIBLE PROCUREMENT

### Assessment of suppliers

		2019	2020	2021
New suppliers assessed using social criteria	(%)	100	100	100

# GRI Content Index

GRI Disclosure	Description of the KPI	Section
<b>PROFILE OF THE ORGANIZATION</b>		
102-1	Name of the organization	Versalis in the world
102-2	Main activities, brands, products and/or services	Versalis in the Eni value chain
102-3	Main registered office	Versalis in the world
102-4	Countries of operation	Versalis in the world
102-5	Ownership structure and legal form	Governance and risk management
102-6	Markets served	Versalis in the world
102-7	Size of the organization	Versalis in the world
102-8	Number of employees by type of contract, region and gender	Versalis in the world Key sustainability indicators
102-9	Description of the supply chain (activities, products, number of suppliers, suppliers by geographic area, order value)	Versalis in the Eni value chain Responsible procurement
102-10	Significant changes during the reporting period concerning the Group's size, structure, ownership, or the supply chain	Methodological note
102-11	Application of the principle or prudential approach	Governance and risk management
102-12	Adoption of external economic, social and environmental codes and principles	Stakeholder engagement activities
102-13	Membership of national or international support associations and organizations	Stakeholder engagement activities Circular economy Environment
<b>STRATEGY</b>		
102-14	Statement by the Chairman and Chief Executive Officer	Message to our stakeholders
102-15	Main impacts, risks and opportunities	Governance and risk management Material topics for Versalis
<b>ETHICS AND INTEGRITY</b>		
102-16	Values, principles, standards, codes of conduct and codes of ethics	Governance and risk management
<b>GOVERNANCE</b>		
102-18	Governance structure of the organization, including committees of the highest governing body. Presence of other committees responsible for making choices on socio-environmental issues	Governance and risk management
<b>STAKEHOLDER INVOLVEMENT</b>		
102-40	List of engaged stakeholders	Stakeholder engagement activities
102-41	Percentage of employees covered by collective agreements	Key sustainability indicators
102-42	Process of identification and selection of stakeholders to be engaged	Stakeholder engagement activities
102-43	Approach to stakeholder engagement	Stakeholder engagement activities
102-44	Key aspects and criticisms emerging from stakeholder engagement and related actions	Stakeholder engagement activities
<b>REPORT PARAMETERS</b>		
102-45	List of entities included in the consolidated financial statements and those not included in the sustainability report	Methodological note
102-46	Process for defining content	Methodological note
102-47	Material aspects identified	Material topics for Versalis
102-48	Explanation of the effects of changes in information included in previous financial statements and the reasons therefore	Versalis for 2021 is the first Versalis sustainability report
102-49	Significant changes since the previous budget	Compared to 2019, as at 01/01/2020 Versalis Zeal Ltd, Versalis Kimya Ticarest Ltd Sirketi and Versalis Mexico S. de RL de CV entered the scope of consolidation of the Versalis Group and are direct subsidiaries of Versalis International.
102-50	Reporting period	Methodological note
102-52	Reporting cycle	Methodological note
102-53	Contacts and addresses for budget information	<a href="http://www.versalis.eni.com/sostenibilita">www.versalis.eni.com/sostenibilita</a>
102-54	Statement on reporting in accordance with GRI Standards	GRI Content Index Methodological note
102-55	GRI table of contents	GRI Content Index

Material appearance/ GRI Disclosure	Description of the KPI	Section	Omissions
<b>CONTRASTING CLIMATE CHANGE</b>			
GHG emissions; Management of energy resources			
<b>Emissions - Management Approach (103-1; 103-2; 103-3)</b>		Chemicals from renewable sources Circular economy at the service of decarbonization GHG emissions and management of energy resources	
305-1	Direct GHG emissions - Scope 1	Key sustainability indicators	
305-2	Indirect GHG emissions from energy consumption (Scope 2)	Key sustainability indicators	
<b>Energy - Management Approach (103-1; 103-2; 103-3)</b>		GHG emissions and energy resource management	
302-1	Energy consumed within the organization	Key sustainability indicators	
302-4	Reduction of energy consumption	Key sustainability indicators	
<b>PEOPLE</b>			
Diversity, Equal Opportunities and Inclusion; Employment and Well-being; Training and Professional Growth			
<b>Employment - Management Approach (103-1; 103-2; 103-3)</b>		People	
401-1	New hires and turnover	Key sustainability indicators	
<b>Training and Education - Management Approach (103-1; 103-2; 103-3)</b>		People	
404-1	Average annual hours of training per employee	Key sustainability indicators	
<b>Diversity and Equal Opportunities - Management Approach (103-1; 103-2; 103-3)</b>		Governance and risk management People	
405-1	Diversity in governing bodies and among employees	Key sustainability indicators	
<b>HEALTH AND SAFETY</b>			
Health and safety in the workplace; Asset integrity; Product stewardship			
<b>Health and Safety at Work - Management Approach (103-1; 103-2; 103-3; 403-1; 403-2; 403-3; 403-4; 403-5; 403-6; 403-7)</b>		Safety	
403-9	Accidents at work	Key sustainability indicators	
403-10	Occupational diseases	Key sustainability indicators	
<b>Product stewardship - Management approach (103-1; 103-2; 103-3)</b>		Safety	
<b>Asset integrity - Management approach (103-1; 103-2; 103-3)</b>		Safety	
<b>ENVIRONMENT</b>			
Air quality; Waste management; Water resource management			
<b>Water and waste water - Management approach (103-1; 103-2; 103-3; 303-1; 303-2)</b>		Environment	
303-3	Water withdrawal	Key sustainability indicators	
303-4	Water discharge	Key sustainability indicators	
<b>Emissions - Management Approach (103-1; 103-2; 103-3)</b>		Environment	
305-7	Nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ) and other significant emissions	Key sustainability indicators	
<b>Waste - Management Approach (103-1; 103-2; 103-3; 306-1; 306-2)</b>		Environment	
306-3	Waste generated	Key sustainability indicators	
306-4	Waste not destined for disposal	Key sustainability indicators	
306-5	Waste destined for disposal	Key sustainability indicators	
<b>CIRCULAR ECONOMY</b>			
<b>Circular Economy - Management Approach (103-1; 103-2; 103-3)</b>		Circular economy serving decarbonization Circular economy	
<b>PROCUREMENT</b>			
<b>Social assessment of suppliers - Management approach (103-1; 103-2; 103-3)</b>		Responsible procurement	
414-1	New suppliers assessed using social criteria	Key sustainability indicators	
<b>TRANSPARENCY IN BUSINESS MANAGEMENT</b>			
Transparency and anti-corruption			
<b>Anti-Corruption - Management Approach (103-1; 103-2; 103-3)</b>		Transparency in business management	
205-2	Communication and training on anti-corruption policies and procedures	Key sustainability indicators	
<b>RELATIONSHIPS WITH THE LOCAL AREA AND CUSTOMERS</b>			
<b>Relationships with the local area and customers - Management Approach (103-1; 103-2; 103-3)</b>		Relationships with the local area and customers	
<b>INNOVATION AND RESEARCH AND DEVELOPMENT</b>			
<b>Innovation and Research and Development - Management Approach (103-1; 103-2; 103-3)</b>		Innovation, Research and Development	

# Methodological note

Versalis for 2021 - A Just Transition is part of Eni's sustainability reporting, which includes the Consolidated Non-Financial Statement (DNF) and the Eni Sustainability Report for, prepared in accordance with the Global Reporting Initiative's Sustainability Reporting Standards (GRI Standards). Furthermore, this reporting system is complemented by the information provided on the Eni corporate website, to which reference should be made for more in-depth information on the issues discussed in this report.

Versalis for 2021 - A Just Transition has been prepared in line with the GRI Standards, according to the "in accordance Core" option to provide stakeholders with clear and detailed information on sustainability issues related to the activities of Eni's chemical company, as well as to provide an overview of the investments that Versalis is making. The most significant topics form the basis of this document, which provides qualitative and quantitative information on Versalis' sustainability performance. The significance of topics derives from the sector and context in which the Company operates and, from an internal point of view, has also been determined with respect to Eni's principles and values, strategies and business objectives.

The data reported was collected with the aim of presenting a clear and balanced picture of the actions and characteristics of Versalis. The collection process for information and quantitative data has been structured to guarantee comparability of data across several years, in order to enable a correct reading of the information and a complete view for all the stakeholders interested in the trend in Eni's performance. Furthermore, the figures reported represent Eni's share of the KPIs reported at a consolidated level in DNF and Eni for 2021, document subject to limited audit by the designated independent auditing company.

## REPORTING SCOPE

The information included in this document refers to the activities of Versalis S.p.A. and its subsidiaries on a line-by-line basis, i.e. Versalis Deutschland GmbH, Versalis France s.a.s., Versalis International sa\*, Versalis Americas Inc, Dunastyr Polystyrene Manufacturing Co Ltd, Versalis UK Ltd, Versalis Pacific Trading (Shanghai) Co Ltd, Versalis Singapore PTE Ltd. The figures and performance indicators refer, unless otherwise specified, to the year ended 31 December 2021 and the 2020 and 2019 figures are also shown for comparative purposes. Furthermore, it should also be noted that for requirements related to the monitoring and consolidation of quantitative data within the Versalis management and reporting systems, the data of the company Finproject, formally acquired in the second half of 2021, are excluded from the reporting scope: where present, they are appropriately pointed out. The activities and projects reported in the document are reported, where relevant, to the first quarter of 2022 in order to provide the reader with the most up-to-date information possible. With regard to environmental data (water consumption, energy consumption, emissions and waste), the contributions directly attributable to Versalis related to its operations were considered. These, therefore, also include any interchange of resources with other Eni Group entities. The performance indicators, selected on the basis of the material topics identified, were collected on an annual basis; the reporting periodicity is determined on an annual basis.

\* Versalis Zeal Ltd, Versalis Kimya Ticarest Ltd Sirketi and Versalis Mexico S. de RL de CV, are direct subsidiaries controlled by Versalis International which, as at 01/01/2020 entered the scope of consolidation of the Versalis Group due to exceeding the relevant parameters.

# Calculation methodologies

KPI	Methodology
<b>CARBON NEUTRALITY</b>	
<b>GHG emissions</b>	<p><b>Scope 1 Emissions:</b> direct GHG emissions are those from sources attributable to the company's assets (e.g. combustion, flaring, fugitive), and include CO<sub>2</sub>, CH<sub>4</sub> and n<sub>2</sub>O. The Global Warming Potential used for conversion to CO<sub>2</sub> equivalent is 25 for CH<sub>4</sub> and 298 for N<sub>2</sub>O. It does not include contributions of CO<sub>2</sub> emissions of biogenic origin.</p> <p><b>Scope 2 emissions:</b> are the indirect GHG emissions related to the generation of electricity, steam and heat purchased from third parties and consumed in the company's assets.</p>
<b>Energy consumption</b>	<p><b>Consumption of primary sources:</b> total consumption of primary sources such as fuel gas, natural gas, biomass, other petroleum products.</p> <p><b>Primary energy purchased from other companies:</b> the sum of purchases of electricity, heat and steam from third parties. Consumption from renewable sources also depends on the national electricity mix.</p>
KPI	Methodology
<b>OPERATIONAL EXCELLENCE</b>	
<b>PEOPLE</b>	
<b>Employment</b>	Versalis uses a large number of contractors to carry out activities at its sites.
<b>Industrial relationships</b>	<p>With regard to industrial relationships, the minimum preliminary notice period for operational changes is in line with the provisions of the laws in force and the trade union agreements which were signed.</p> <p><b>Employees covered by collective bargaining agreements means</b> those employees whose employment relationship is governed by collective contracts or agreements, whether national, category, company or site.</p>
<b>Seniority</b>	Average number of years worked by personnel employed by Versalis.
<b>Hours of training</b>	Hours provided to Versalis employees through training courses managed and delivered both by Eni Corporate University (classroom and distance learning) and independently, including on-the-job training. Average training hours are calculated as total training hours divided by the average number of employees in the year.
<b>Local senior managers and middle managers abroad</b>	Ratio of number of senior managers + local middle managers (employees originating from the country where their main work activities are based) to total foreign employment.
<b>Rate of turnover</b>	Ratio of the number of recruitments + terminations of permanent contracts to permanent employment in the previous year.
<b>Rate of replacement</b>	Relationship between recruitment and termination of permanent contracts.
<b>HEALTH</b>	
<b>Health</b>	<p><b>OIFR (Occupational Illness Frequency Rate):</b> index of the frequency of reported occupational diseases of employees. Ratio between the number of employee reports of occupational disease in the reference accounting period and the hours worked in the same period. Result of the ratio multiplied by 1,000,000.</p> <p><b>Recordable cases of occupational diseases:</b> number of occupational disease reports.</p> <p><b>Main types of disease</b> suspected occupational diseases reported to the employer concern pathologies that may have a causal link with the occupational risk, in that they may have been contracted in the course of and as a result of work activities involving prolonged exposure to risk agents present in the workplace. The risk may be caused by the processing performed, or by the environment in which the processing takes place. The main risk agents from whose prolonged exposure an occupational disease may result are: (i) chemical agents (e.g. disease: neoplasms, diseases of the respiratory system, blood diseases); (ii) biological agents (e.g. disease: malaria); (iii) physical agents (e.g. disease: hearing loss).</p>
<b>SAFETY</b>	
<b>Safety</b>	<p><b>TRIR:</b> frequency index of total recordable injuries (injuries with absence days, medical treatment and cases of work restriction). Numerator: number of total recordable accidents; denominator: hours worked during the same period. Result of the ratio multiplied by 1,000,000.</p> <p><b>Index of accidents at work with serious consequences:</b> occupational accidents with an absence of more than 180 days or resulting in total or permanent incapacity. Numerator: number of accidents at work with serious consequences; denominator: hours worked in the same period. Result of the ratio multiplied by 1,000,000.</p> <p><b>Near miss:</b> an accidental event, the origin, execution and potential effect of which is accidental in nature, but which is however different from an accident only in that the result has not proved injurious, due to luck or favourable circumstances, or to the mitigating intervention of technical and/or organizational protection systems. Accidents that do not result in damage or injury are therefore to be considered near misses.</p>
<b>ENVIRONMENT</b>	
<b>Water resource</b>	<p><b>Water withdrawal:</b> sum of sea water withdrawn, fresh water withdrawn and brackish water from underground or surface sources. Water from TAF represents the share of polluted groundwater treated and reused in the production cycle.</p> <p>The limit for fresh water, which is more conservative than the GRI standard of reference (of 1,000 ppm), is 2,000 ppm TDS (Total Dissolved Solids), as stipulated in the IPIECA(a)/API/IOGP 2020 guide.</p> <p><b>Water Discharges</b> the internal procedures relating to the operational management of water discharges govern control of minimum quality standards and authorization limits prescribed for each operational site, ensuring compliance and prompt resolution in the event limits are exceeded.</p>
<b>Waste</b>	<p><b>Waste from production activities:</b> waste directly linked to the production of goods and production activities.</p> <p><b>Waste from remediation activities:</b> this includes waste resulting from soil safety and remediation activities, demolition activities, excavation results and/or sludges, oils and equipment remediation.</p> <p>The method of waste disposal is communicated by the party authorised for disposal.</p>
<b>Air protection</b>	<p><b>NO<sub>x</sub>:</b> total direct emissions of nitrogen oxides from combustion processes with air. Including NO<sub>x</sub> emissions from flaring activities, including NO and NO<sub>2</sub> emissions, excluding N<sub>2</sub>O.</p> <p><b>SO<sub>x</sub>:</b> total direct emissions of sulphur oxides, including SO<sub>2</sub> and SO<sub>3</sub>.</p> <p><b>NM<sub>VOC</sub>:</b> total direct emissions of hydrocarbons, substituted hydrocarbons and oxygenated hydrocarbons, which evaporate at room temperature. LPG is included and methane is excluded.</p> <p><b>PST:</b> direct emissions of Total Suspended Particulate Matter, finely divided solid or liquid material suspended in gas flows. Standard emission factors.</p>
<b>RESPONSIBLE PROCUREMENT</b>	
<b>New suppliers assessed using social criteria</b>	The indicator refers to all new suppliers subject to Due Diligence or subject to a qualification process or subject to a performance evaluation feedback on HSE or Compliance areas or subject to a feedback process or subject to an assessment on human rights issues (inspired by the SA 8000 standard or similar certification), for which Vendor Management activities are centralised in Eni SpA.

# Glossary

## CARBON NEUTRALITY BY 2050

	<b>CRACKING</b>	In chemistry, cracking is a process adopted for the production of light hydrocarbons through the thermal and/or catalytic breakdown of heavy hydrocarbon molecules.
	<b>ELASTOMERS</b>	Polymers that possess elasticity with a variety of applications, such as tyres, footwear, adhesives, components for construction and the automotive industry, pipes, electrical cables, household appliances, modifiers and additives for plastics and bitumen, synthetic latexes for paper coating and moulded foam.
	<b>LIFE CYCLE ASSESSMENT (LCA)</b>	An internationally structured and standardised method that makes it possible to quantify the potential environmental and human health impacts associated with a good or service from its resource consumption and emissions.
	<b>PIROLYSIS</b>	Thermochemical decomposition process of polymers.
	<b>POLYMER</b>	Macromolecules, i.e. molecules with a high molecular weight, consisting of a large number of the same or different molecular groups (or structural units), joined in a "chain" by repetition of the same type of bond.

## OPERATIONAL EXCELLENCE

	<b>ASSET INTEGRITY</b>	The ability of an asset to operate effectively and accurately, while safeguarding the well-being of personnel and equipment throughout the life cycle of the asset, from its design phase to its decommissioning.
	<b>HEALTH CARE</b>	Outpatient and home management of acute and chronic conditions according to best practice and in agreement with the patient, including interventions and actions for global health promotion and protection.
	<b>BIOETHANOL</b>	Ethanol produced by a fermentation process of biomass, i.e. sugar-rich agricultural products (carbohydrates) such as cereals, sugar crops, starch and pomace.
	<b>RESIDUAL BIOMASS</b>	Non-hazardous waste that may only be delivered to facilities that process waste.
	<b>CEFIC</b>	European Chemical Industry Council.
	<b>COMPOUND</b>	A mixture between polymers and/or between polymers and additives to achieve particular properties in the final product.
	<b>INTERMEDIATES</b>	Basic monomers derived mainly from the cracking process for important industrial uses in the production of intermediates, plastics, petroleum chemicals and other components in the rubber, solvent and lubricant industries.
	<b>MONOMER</b>	Molecule capable of combining with two, three or many identical molecules to form higher molecular weight compounds.
	<b>NATECH</b>	Technological accidents, such as fires, explosions and toxic releases that may occur within industrial complexes and along distribution networks following natural disasters.
	<b>NBR</b>	Synthetic rubber obtained from the copolymerisation of acrylonitrile with butadiene. Material useful for the manufacture of disposable gloves.
	<b>POLYETHYLENE</b>	Polymeric material derived from ethylene and used in the production of a wide range of finished products, such as packaging films, bottles, containers, compounds for civil and automotive applications.
	<b>POLYOLEFIN</b>	Macromolecules obtained through the polymerisation of olefins.
	<b>HEALTH SURVEILLANCE</b>	Provision for workers for whom the risk assessment has shown a health risk. The purpose of health surveillance is to: assess specific suitability for work, detect clinical or pre-clinical abnormalities in good time, prevent deterioration of the worker's health, assess the effectiveness of preventive measures in the workplace and reinforce correct work measures and conduct.
	<b>STYRENES</b>	Highly versatile, lightweight and recyclable plastics with good mechanical properties and high insulating power, used in the production of industrial and food packaging, household appliances, insulation, electrical and electronic equipment, and automotive components.

## DEVELOPMENT ALLIANCES

	<b>SDG</b>	The Sustainable Development Goals (SDGs) are the plan to achieve a better and more sustainable future for all by 2030. Adopted by all member states of the UN in 2015, they address global challenges the world is battling, including those related to poverty, inequality, climate change, environmental degradation, peace and justice.
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# Eni's non-financial reporting

Through its non-financial reporting, Eni wants to proactively describe its role in the energy transition, sharing its values, corporate strategies, objectives and results achieved to date. For this reason, also aware of the increasing centrality of non-financial information, over the years Eni has developed a structured reporting system with the aim of satisfying the information needs of its stakeholders in a complete and timely manner in terms of both variety and depth.



## CONSOLIDATED NON-FINANCIAL REPORT

The 2021 Consolidated Non-Financial Statement (CNFS), drawn up in accordance with the requirements of Legislative Decree 254/2016 (transposing European Directive 95/2014) and published in the Annual Report 2021, has the aim of concisely meeting the information needs of Eni stakeholders, further promoting the integration of financial and non-financial information. The NFI provides integrated reporting on the management model, policies applied, main risks and results related to environmental, social, personnel, human rights and anti-corruption issues.



## ENI FOR - A JUST TRANSITION

Report that describes how, through the integrated business model, Eni creates long-term value, through the operational excellence model, alliances for local development and carbon Neutrality by 2050.



## ENI FOR - CARBON NEUTRALITY BY 2050

In-depth analysis of governance, risk management activities, strategy and main Eni metrics and targets on climate change.



## ENI FOR - SUSTAINABILITY PERFORMANCE

Report, available only online, which provides an overview of non-financial performance indicators along the three pillars of Eni's business model.



## ENI FOR HUMAN RIGHTS

A report which describes Eni's strategy on promoting and respecting human rights and shows the main activities and performance indicators.



## ENI LOCAL REPORT

In addition to these documents, Eni publishes other local sustainability reports on an annual basis, which will be available on the website over the course of 2022.



versalis

### Versalis SpA

#### Registered office

Piazza Boldrini 1- 20097 San Donato Milanese (MI)

Share capital €446,050,728.65 fully paid up

Fiscal Code and Company Register Milan - Monza - Brianza - Lodi no. 03823300821

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Company subject to the management and coordination of Eni SpA

Single member company

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